

File Copy

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Page 1

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:34:48 ON 07 FEB 2005

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 FEB 2005 HIGHEST RN 826990-02-7

DICTIONARY FILE UPDATES: 6 FEB 2005 HIGHEST RN 826990-02-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

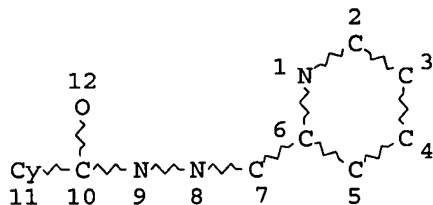
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d sta que l16

L1 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

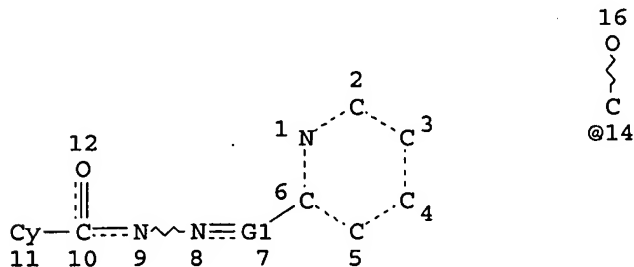
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3 1614 SEA FILE=REGISTRY SSS FUL L1

L4 STR



VAR G1=CH/14

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 16

DEFAULT MLEVEL IS ATOM

GGCAT IS MCY AT 11

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

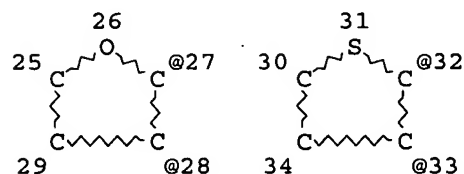
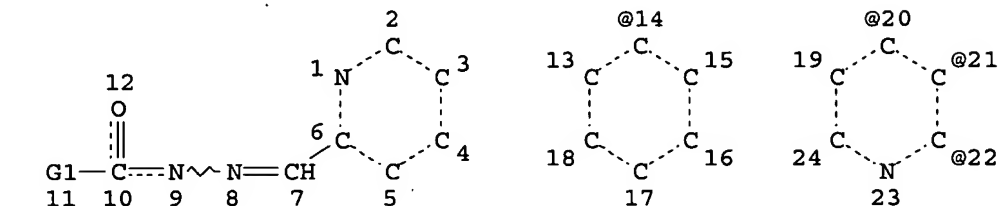
RSPEC 6

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L6 793 SEA FILE=REGISTRY SUB=L3 SSS FUL L4

L7 STR



VAR G1=14/20/21/22/32/33/27/28

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

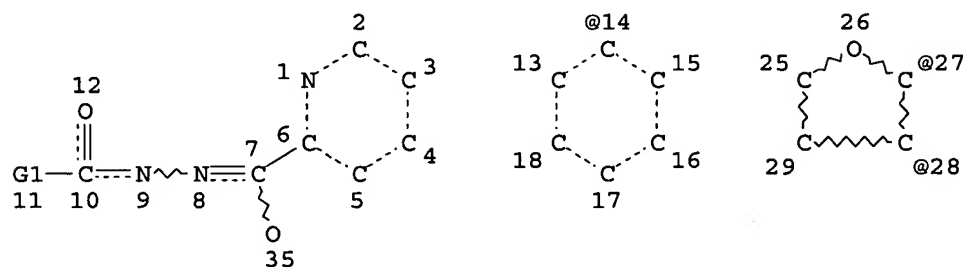
RSPEC 6 13 19 25 30

NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE

L9 496 SEA FILE=REGISTRY SUB=L6 SSS FUL L7

L10 STR



VAR G1=14/27/28

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 35

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

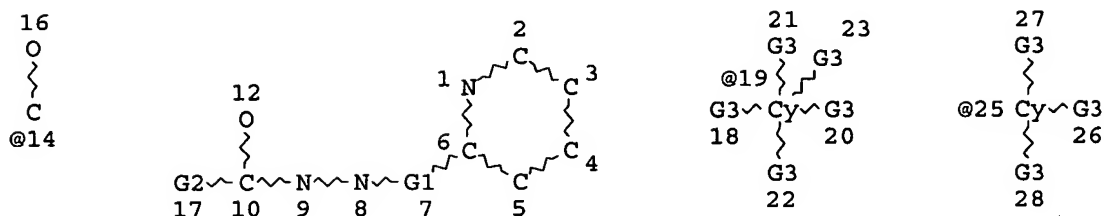
RSPEC 6 13 25

NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L12 89 SEA FILE=REGISTRY SUB=L6 SSS FUL L10

L13 STR



VAR G1=C/14
 VAR G2=19/25
 VAR G3=H/AK/X/NO2/N/O
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 GGCAT IS MCY AT 19
 GGCAT IS MCY AT 25
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC 6
 NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
 L14 585 SEA FILE=REGISTRY ABB=ON PLU=ON (L9 OR L12)
 L16 110 SEA FILE=REGISTRY SUB=L14 CSS FUL L13

100.0% PROCESSED 585 ITERATIONS 110 ANSWERS
 SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 11:11:27 ON 07 FEB 2005)
 SET COST OFF

FILE 'REGISTRY' ENTERED AT 11:11:39 ON 07 FEB 2005

L1 STR
 L2 46 S L1
 L3 1614 S L1 FUL
 SAV L3 ZINNA069/A
 L4 STR L1
 L5 33 S L4 SAM SUB=L3
 L6 793 S L4 FUL SUB=L3
 SAV L6 ZINNA069A/A
 L7 STR L4
 L8 25 S L7 SAM SUB=L6
 L9 496 S L7 FUL SUB=L6
 SAV L9 ZINNA069B/A
 L10 STR L7
 L11 6 S L10 SAM SUB=L6
 L12 89 S L10 FUL SUB=L6
 SAV L12 ZINNA069C/A
 L13 STR L1
 L14 585 S L9,L12
 L15 5 S L13 CSS SAM SUB=L14
 L16 110 S L13 CSS FUL SUB=L14
 SAV L16 ZINNA069D/A

FILE 'HCAPLUS' ENTERED AT 11:23:50 ON 07 FEB 2005

L17 1 S WO2000-AU1050/AP,PRN
 L18 1 S AU99-2624/AP,PRN

L19 E RICHARDSON D/AU
 473 S E3-E27
 L20 E RICHARDSON DES/AU
 100 S E3-E8
 E BERNDHART P/AU
 E BERNHARDT P/AU
 L21 183 S E3,E5,E7,E10,E11
 E BECKER E/AU
 L22 142 S E3,E17,E18
 E BECKER ERIKA/AU
 L23 6 S E3-E5
 E BECKER ERICA/AU
 L24 107 S L16
 L25 12 S L24 AND L17-L23
 L26 1 S L17,L18 AND L25
 SEL RN

FILE 'REGISTRY' ENTERED AT 11:27:37 ON 07 FEB 2005

L27 17 S E1-E17
 L28 12 S L27 AND L3
 L29 5 S L27 NOT L28
 L30 4 S L29 AND NC5/ES

FILE 'HCAPLUS' ENTERED AT 11:29:18 ON 07 FEB 2005

L31 3 S L28
 L32 2 S L31 AND L25
 L33 3 S L31,L32,L26
 L34 3 S L25 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
 L35 4 S L33,L34
 L36 69 S L24 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
 L37 66 S L36 NOT L35
 SEL HIT RN

FILE 'REGISTRY' ENTERED AT 11:30:40 ON 07 FEB 2005

L38 32 S E18-E49

FILE 'HCAPLUS' ENTERED AT 11:31:06 ON 07 FEB 2005

L39 21 S L16 (L) (BAC OR THU OR BSU OR PKT OR PAC OR DMA)/RL
 L40 24 S L16 (L) BIOL/RL
 L41 0 S L16 (L) BUU/RL
 L42 29 S L16 AND (PHARMACEUT? OR PHARMACOL?)/SC,SX
 L43 17 S L37 AND L39-L42
 E CHELATING AGENTS/CT
 L44 12645 S E3-E7
 E E3+ALL
 L45 1582 S E4-E6
 L46 12819 S E3+NT
 L47 4411 S E17+OLD,NT
 L48 2 S L37 AND L44-L47
 L49 18 S L43,L48
 L50 9 S L37 AND P/DT
 L51 21 S L49,L50
 L52 25 S L35,L51

FILE 'REGISTRY' ENTERED AT 11:34:48 ON 07 FEB 2005

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 11:35:28 ON 07 FEB 2005

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FILE COVERS 1907 - 7 Feb 2005 VOL 142 ISS 7
FILE LAST UPDATED: 6 Feb 2005 (20050206/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr tot 152

L52 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:222333 HCAPLUS
DN 138:255233
ED Entered STN: 21 Mar 2003
TI Heteropolycyclic compounds, particularly pyridyl- and phenyl-substituted 1,2,4-oxadiazoles and analogs, and their use as metabotropic glutamate receptor antagonists for inhibiting neuronal damage
IN Van Wagenen, Bradford; Stormann, Thomas M.; Moe, Scott T.; Sheehan, Susan M.; McLeod, Donald A.; Smith, Daryl L.; Isaac, Methvin Benjamin; Slassi, Abdelmalik
PA NPS Pharmaceuticals, Inc., USA
SO U.S. Pat. Appl. Publ., 151 pp., Cont.-in-part of Appl. No. PCT/US00/22618. CODEN: USXXCO
DT Patent
LA English
IC ICM A61K031-444
ICS A61K031-4439; C07D041-14; C07D413-02
NCL 514333000; 514340000; 514341000; 546256000; 546269400; 546272400
CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 3

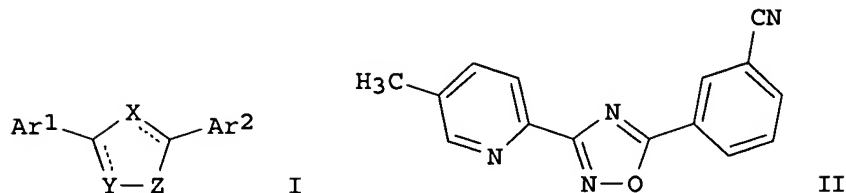
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003055085	A1	20030320	US 2002-76618	20020219 <--
US 6660753	B2	20031209		
WO 2001012627	A1	20010222	WO 2000-US22618	20000818 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI US 1999-149464P	P	19990819	<--	
WO 2000-US22618	A2	20000818		
US 2001-269847P	P	20010221		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003055085	ICM	A61K031-444
	ICS	A61K031-4439; C07D041-14; C07D413-02

NCL 514333000; 514340000; 514341000; 546256000; 546269400;
546272400

OS MARPAT 138:255233
GI



- AB The title compds. [I; X, Y, Z = N, O, S, CR1 and at least one of X, Y, and Z = heteroatom; R1 = H, alkyl, CF₃, etc.; Ar1, Ar2 = (un)substituted (hetero)aryl] that act as antagonists at metabotropic glutamate receptors, and that are useful for treating neurol. diseases and disorders, were prepared The compds. I exhibit a high degree of potency and selectivity for individual metabotropic glutamate receptor subtypes, notably mGluR5. In particular, medical conditions associated with metabotropic glutamate receptors and therefore targeted by the invention compds. include stroke, head trauma, anoxic injury, ischemic injury, hypoglycemia, epilepsy, pain, migraine headaches, Parkinson's disease, senile dementia, Huntington's Chorea, and Alzheimer's disease. Several hundred specific examples are individually prepared and/or claimed. A variety of intermediates were also prepared For instance, 5-methylpyridin-2-ylamidoxime was prepared from 2-bromo-5-methylpyridine by Zn- and Pd-complex-mediated cyanation (56%) and reaction of the resulting nitrile with NH₂OH.HCl (60%). Cyclization of the amidoxime with 3-cyanobenzoyl chloride (86%) gave invention compound II. In a bioassay for mGluR5 antagonism in primary astrocyte cultures from rats, the invention compds. I had IC₅₀ values in the range of 11 to 9140 nM.
- ST oxadiazole triazole oxazole furan prepn mGluR5 antagonist;
heteropolycyclic phenylpyridyloxadiazole prepn metabotropic glutamate receptor antagonist neuroprotectant
- IT Nervous system, disease
(Huntington's chorea, treatment of; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)
- IT Brain, disease
(ischemia, treatment of; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)
- IT Glutamate receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metabotropic, mGluR5; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)
- IT Headache
(migraine, treatment of; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)
- IT Cytoprotective agents
(neuroprotective; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)
- IT Analgesics
Anti-Alzheimer's agents
Anti-ischemic agents
Anticonvulsants

Antimigraine agents
 Antiparkinsonian agents
 Anxiolytics
 Glutamate antagonists
 Human

Nervous system agents

Psychotropics

(preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT Mental disorder

(senile psychosis, treatment of; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT Brain, disease

(stroke, treatment of; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT Head, disease

(trauma, treatment of; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT Alzheimer's disease

Anxiety

Epilepsy

Hypoglycemia

Hypoxia, animal

Mental disorder

Nervous system, disease

Pain

Parkinson's disease

(treatment of; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT 453565-92-9P, 3-[Imino(methoxy)methyl]-5-trifluoromethoxybenzoic acid

RL: BYP (Byproduct); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(byproduct and precursor; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT 453568-64-4P, 5-Bromo-1,3-bis(1-imidazolyl)benzene

RL: BYP (Byproduct); PREP (Preparation)

(byproduct; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT 327056-22-4P, 3-(2-Pyridyl)-5-(3-fluoro-5-cyanophenyl)-1,2,4-oxadiazole

327056-26-8P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-fluorophenyl)-1,2,4-

oxadiazole 327056-37-1P, 3-(2-Pyridyl)-5-(2-bromo-5-methoxyphenyl)-1,2,4-

oxadiazole 327056-46-2P, 2-(3-Bromophenyl)-4-(pyridin-2-yl)-1,3-oxazole

453566-27-3P, 3-(5-Cyano-2-pyridyl)-5-(3-bromophenyl)-1,2,4-oxadiazole

453566-32-0P, 3-(5-Cyano-2-pyridyl)-5-(3-bromo-5-fluorophenyl)-1,2,4-

oxadiazole 453566-34-2P, 3-(2-Pyridyl)-5-(5-bromo-2-methoxyphenyl)-1,2,4-

oxadiazole 453566-35-3P, 3-(2-Pyridyl)-5-(5-bromo-2-fluorophenyl)-1,2,4-

oxadiazole 453566-37-5P, 3-(2-Pyridyl)-5-(5-bromopyrid-3-yl)-1,2,4-

oxadiazole 453566-40-0P, 3-(5-Fluoropyrid-2-yl)-5-(5-bromopyrid-3-yl)-

1,2,4-oxadiazole 453566-46-6P, 3-(2-Pyridyl)-5-(3-cyano-5-methylphenyl)-

1,2,4-oxadiazole 453566-48-8P, 3-(2-Pyridyl)-5-(3-fluoro-5-bromophenyl)-

1,2,4-oxadiazole 453566-50-2P, 3-(5-Fluoro-2-pyridyl)-5-(3-fluoro-5-

bromophenyl)-1,2,4-oxadiazole 453566-51-3P, 3-(2-Pyridyl)-5-[3-allyloxy-

5-(methoxycarbonyl)phenyl]-1,2,4-oxadiazole 453566-52-4P,

3-(2-Pyridyl)-5-[3-iodo-5-(methoxycarbonyl)phenyl]-1,2,4-oxadiazole

453566-53-5P, 3-(2-Pyridyl)-5-[3-methoxy-5-(methoxycarbonyl)phenyl]-1,2,4-

oxadiazole 453566-54-6P, 3-(2-Pyridyl)-5-(3-bromo-5-cyanophenyl)-1,2,4-

oxadiazole 453566-55-7P, 3-(2-Pyridyl)-5-(5-cyano-3-iodophenyl)-1,2,4-oxadiazole 453566-86-4P, 3-(2-Pyridyl)-5-(3-cyano-5-nitrophenyl)-1,2,4-oxadiazole 453566-87-5P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-nitrophenyl)-1,2,4-oxadiazole 453567-04-9P, 3-(5-Fluoropyrid-2-yl)-5-(3-bromophenyl)-1,2,4-oxadiazole 453567-05-0P, 5-(2-Chloro-6-methylpyrid-4-yl)-3-(2-pyridyl)-1,2,4-oxadiazole 453567-06-1P, 5-(2-Chloro-6-methoxypyrid-4-yl)-3-(2-pyridyl)-1,2,4-oxadiazole 453567-08-3P, 3-(5-Bromopyrid-3-yl)-5-(2-pyridyl)-1,2,4-oxadiazole 453567-09-4P, 3-(3-Cyano-5-fluorophenyl)-5-(2-pyridyl)-1,2,4-oxadiazole 453567-10-7P, 3-(3-Iodophenyl)-5-(2-pyridyl)-1,2,4-oxadiazole 453567-36-7P, 3-(5-Fluoro-2-pyridyl)-5-[3-fluoro-5-(3-pyridyl)phenyl]-1,2,4-oxadiazole 453567-41-4P, 3-(Pyrid-2-yl)-5-[3-fluoro-5-(methylthio)phenyl]-1,2,4-oxadiazole 453567-96-9P, 3-(2-Pyridyl)-5-(3-cyano-5-vinylphenyl)-1,2,4-oxadiazole 453567-99-2P 453568-01-9P, 3-(2-Pyridyl)-5-(3-carboxy-5-methoxyphenyl)-1,2,4-oxadiazole 453568-02-0P, 3-(2-Pyridyl)-5-[3-(carboxamido)-5-methoxyphenyl]-1,2,4-oxadiazole 453568-04-2P, 3-(2-Pyridyl)-5-(3-allyloxy-5-cyanophenyl)-1,2,4-oxadiazole 453568-05-3P, 3-(2-Pyridyl)-5-(3-cyano-5-hydroxyphenyl)-1,2,4-oxadiazole 453568-20-2P, 3-(5-Fluoropyrid-2-yl)-5-(3-amino-5-cyanophenyl)-1,2,4-oxadiazole 453568-31-5P, 3-(5-Fluoropyrid-2-yl)-5-[3-fluoro-5-(1H-tetrazol-5-yl)phenyl]-1,2,4-oxadiazole 453568-45-1P, 2-(3-Iodophenyl)-4-(pyridin-2-yl)-1,3-thiazole 453568-48-4P, 2-(2-Pyridyl)-5-(3-iodophenyl)-1,3,4-oxadiazole 453568-77-9P, 2-(3-Cyano-5-methoxyphenyl)-4-(pyrid-2-yl)-1,3-oxazole

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT 27199-42-4P, 3-(2-Pyridyl)-5-(2-chlorophenyl)-1,2,4-oxadiazole
 76591-82-7P, 3-(2-Pyridyl)-5-(3-chlorophenyl)-1,2,4-triazole
 327056-07-5P, 3-(2-Pyridyl)-5-(3,5-dichlorophenyl)-1,2,4-oxadiazole
 327056-08-6P, 3-(2-Pyridyl)-5-(3-chlorophenyl)-1,2,4-oxadiazole
 327056-09-7P, 3-(2-Pyridyl)-5-(3-methoxyphenyl)-1,2,4-oxadiazole
 327056-10-0P, 3-(2-Pyridyl)-5-[3-(trifluoromethyl)phenyl]-1,2,4-oxadiazole
 327056-11-1P, 3-(2-Pyridyl)-5-(3-fluorophenyl)-1,2,4-oxadiazole
 327056-12-2P, 3-(2-Pyridyl)-5-(3-methylphenyl)-1,2,4-oxadiazole
 327056-13-3P, 3-(2-Pyridyl)-5-(1-naphthyl)-1,2,4-oxadiazole
 327056-14-4P, 3-(2-Pyridyl)-5-[3-(trifluoromethoxy)phenyl]-1,2,4-oxadiazole
 327056-15-5P, 3-(2-Pyridyl)-5-(2,3-difluorophenyl)-1,2,4-oxadiazole
 327056-16-6P, 3-(2-Pyridyl)-5-(2,5-difluorophenyl)-1,2,4-oxadiazole
 327056-17-7P, 3-(2-Pyridyl)-5-(3,5-difluorophenyl)-1,2,4-oxadiazole
 327056-18-8P, 3-(2-Pyridyl)-5-(3-cyanophenyl)-1,2,4-oxadiazole
 327056-19-9P, 3-(2-Pyridyl)-5-(3,5-dimethoxyphenyl)-1,2,4-oxadiazole
 327056-20-2P, 3-(2-Pyridyl)-5-(2,3-dichlorophenyl)-1,2,4-oxadiazole
 327056-21-3P, 3-(2-Pyridyl)-5-(3-chloro-5-cyanophenyl)-1,2,4-oxadiazole
 327056-23-5P, 3-(2-Pyridyl)-5-(3-chloro-5-fluorophenyl)-1,2,4-oxadiazole
 327056-24-6P, 3-(5-Chloropyrid-2-yl)-5-(3-cyanophenyl)-1,2,4-oxadiazole
 327056-25-7P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyanophenyl)-1,2,4-oxadiazole
 327056-27-9P, 3-(3-Fluoropyrid-2-yl)-5-(3-cyanophenyl)-1,2,4-oxadiazole
 327056-28-0P, 3-(5-Fluoropyrid-2-yl)-5-(3,5-dimethoxyphenyl)-1,2,4-oxadiazole 327056-29-1P, 3-(5-Methoxypyrid-2-yl)-5-(3-cyanophenyl)-1,2,4-oxadiazole 327056-30-4P, 3-(2-Quinoliny)-5-(3-cyanophenyl)-1,2,4-oxadiazole 327056-31-5P, 3-(3-Chloro-5-trifluoromethylpyrid-2-yl)-5-(3-cyanophenyl)-1,2,4-oxadiazole 327056-32-6P, 3-(2-Pyridyl)-5-(5-chloro-2-methoxyphenyl)-1,2,4-oxadiazole 327056-33-7P, 3-(2-Pyridyl)-5-(2,3-dimethoxyphenyl)-1,2,4-oxadiazole 327056-34-8P, 3-(2-Pyridyl)-5-[2-chloro-5-(methylthio)phenyl]-1,2,4-oxadiazole 327056-35-9P, 3-(2-Pyridyl)-5-(3-phenoxyphenyl)-1,2,4-oxadiazole 327056-36-0P, 3-(2-Pyridyl)-5-(3-benzoylphenyl)-1,2,4-oxadiazole 327056-38-2P, 3-(2-Pyridyl)-5-[2-chloro-5-(trifluoromethyl)phenyl]-1,2,4-oxadiazole 327056-39-3P, 3-(2-Pyridyl)-5-(3,4,5-trifluorophenyl)-1,2,4-

oxadiazole 327056-40-6P, 3-(2-Pyridyl)-5-(2,5,6-trifluorophenyl)-1,2,4-
oxadiazole 327056-41-7P, 3-(Pyrid-2-yl)-5-(2-hydroxyphenyl)-1,2,4-
oxadiazole 327056-42-8P, 3-(2-Pyridyl)-5-(5-chloro-2-hydroxyphenyl)-
1,2,4-oxadiazole 327056-43-9P, 3-(2-Pyridyl)-5-(2-aminophenyl)-1,2,4-
oxadiazole 327056-44-0P, 3-(2-Pyridyl)-5-(2-amino-5-chlorophenyl)-1,2,4-
oxadiazole 327056-45-1P, 2-(3-Chlorophenyl)-4-(pyridin-2-yl)-1,3-oxazole
327056-47-3P, 2-(3-Cyanophenyl)-4-(pyridin-2-yl)-1,3-oxazole
327056-48-4P, 5-(3-Hydroxyphenyl)-3-(pyridin-2-yl)-1,2-oxazole
327056-49-5P, 3-(2-Pyridyl)-5-(3-iodophenyl)-1,2,4-triazole
327058-75-3P, 3-(3-Methoxyphenyl)-5-(2-pyridyl)-1,2,4-oxadiazole
327058-83-3P, 5-(3-Cyanophenyl)-3-(pyridin-2-yl)-1,2-oxazole
453566-23-9P, 3-(5-Methylpyrid-2-yl)-5-(3-cyanophenyl)-1,2,4-oxadiazole
453566-24-0P, 3-(5-Cyanopyrid-2-yl)-5-(3-cyanophenyl)-1,2,4-oxadiazole
453566-30-8P, 3-(5-Cyano-2-pyridyl)-5-(3-cyano-5-fluorophenyl)-1,2,4-
oxadiazole 453566-36-4P, 3-(2-Pyridyl)-5-(5-cyano-2-fluorophenyl)-1,2,4-
oxadiazole 453566-38-6P, 3-(2-Pyridyl)-5-(5-chloropyrid-3-yl)-1,2,4-
oxadiazole 453566-39-7P, 3-(5-Cyanopyrid-2-yl)-5-(5-bromopyrid-3-yl)-
1,2,4-oxadiazole 453566-41-1P, 3-(2-Pyridyl)-5-[2-(methylthio)pyrid-3-
yl]-1,2,4-oxadiazole 453566-42-2P, 3-(2-Pyridyl)-5-(5-methylpyrid-3-yl)-
1,2,4-oxadiazole 453566-43-3P, 3-(2-Pyridyl)-5-(5-hydroxypyrid-3-yl)-
1,2,4-oxadiazole 453566-44-4P, 3-(2-Pyridyl)-5-(5-methoxypyrid-3-yl)-
1,2,4-oxadiazole 453566-49-9P, 3-(2-Pyridyl)-5-(3-iodo-5-bromophenyl)-
1,2,4-oxadiazole 453566-56-8P, 3-(2-Pyridyl)-5-[3-(N,N-
dimethylamino)phenyl]-1,2,4-oxadiazole 453566-57-9P,
3-(5-Chloropyrid-2-yl)-5-(3-cyano-5-fluorophenyl)-1,2,4-oxadiazole
453566-58-0P, 3-(5-Chloropyrid-2-yl)-5-(3-cyano-5-chlorophenyl)-1,2,4-
oxadiazole 453566-59-1P, 3-(5-Chloropyrid-2-yl)-5-(3-chloro-5-
fluorophenyl)-1,2,4-oxadiazole 453566-60-4P, 3-(5-Chloropyrid-2-yl)-5-(3-
cyano-5-methoxyphenyl)-1,2,4-oxadiazole 453566-62-6P,
3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-chlorophenyl)-1,2,4-oxadiazole
453566-63-7P, 3-(5-Fluoropyrid-2-yl)-5-(3-fluoro-5-chlorophenyl)-1,2,4-
oxadiazole 453566-64-8P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-
methoxyphenyl)-1,2,4-oxadiazole 453566-65-9P, 3-(5-Cyanopyrid-2-yl)-5-(3-
cyano-5-chlorophenyl)-1,2,4-oxadiazole 453566-66-0P,
3-(5-Cyanopyrid-2-yl)-5-(3-fluoro-5-chlorophenyl)-1,2,4-oxadiazole
453566-67-1P, 3-(5-Cyanopyrid-2-yl)-5-(3-cyano-5-methoxyphenyl)-1,2,4-
oxadiazole 453566-68-2P, 3-(5-Fluoropyrid-2-yl)-5-(3,5-dicyanophenyl)-
1,2,4-oxadiazole 453566-69-3P, 3-[3-(4-Dimethylaminobutoxy)pyrid-2-yl]-5-
(3-cyano-5-fluorophenyl)-1,2,4-oxadiazole 453566-73-9P,
3-[3-(5-Dimethylaminopentyloxy)pyrid-2-yl]-5-(3-cyano-5-fluorophenyl)-
1,2,4-oxadiazole 453566-76-2P, 3-[3-(6-Dimethylaminohexyloxy)pyrid-2-yl]-
5-(3-cyano-5-fluorophenyl)-1,2,4-oxadiazole 453566-78-4P,
3-(5-Fluoropyrid-2-yl)-5-[5-fluoro-3-(methylthio)phenyl]-1,2,4-oxadiazole
453566-79-5P, 5-(2-Pyridyl)-3-[3-(1H-imidazol-1-yl)-5-fluorophenyl]-1,2,4-
oxadiazole 453566-80-8P, 3-(2-Pyridyl)-5-(3-fluoro-5-
trifluoromethylphenyl)-1,2,4-oxadiazole 453566-81-9P,
3-(5-Fluoro-2-pyridyl)-5-(3-fluoro-5-trifluoromethylphenyl)-1,2,4-
oxadiazole 453566-82-0P, 3-(5-Cyanopyrid-2-yl)-5-(3-alloxy-5-
cyanophenyl)-1,2,4-oxadiazole 453566-83-1P, 3-(5-Fluoropyrid-2-yl)-5-(3-
alloxy-5-cyanophenyl)-1,2,4-oxadiazole 453566-84-2P,
3-(5-Cyanopyrid-2-yl)-5-(3-cyano-5-propoxyphenyl)-1,2,4-oxadiazole
453566-85-3P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-propoxyphenyl)-1,2,4-
oxadiazole 453566-88-6P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-
dimethylaminophenyl)-1,2,4-oxadiazole 453566-89-7P, 3-(5-Fluoropyrid-2-
yl)-5-[3-cyano-5-(2-methoxyethoxy)phenyl]-1,2,4-oxadiazole 453566-90-0P,
3-(5-Fluoropyrid-2-yl)-5-[3-cyano-5-(1H-imidazol-1-ylmethyl)phenyl]-1,2,4-
oxadiazole 453566-91-1P, 3-(2-Pyridyl)-5-[3-cyano-5-
(methoxymethyl)phenyl]-1,2,4-oxadiazole 453566-92-2P,
3-(3-Cyano-5-methoxyphenyl)-5-(2-pyridyl)-1,2,4-oxadiazole 453566-93-3P,
3-(3-Cyano-5-methoxyphenyl)-5-(5-fluoropyrid-2-yl)-1,2,4-oxadiazole
453566-95-5P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-ethoxyphenyl)-1,2,4-
oxadiazole 453566-96-6P, 3-(5-Cyanopyrid-2-yl)-5-(3-cyano-5-
ethoxyphenyl)-1,2,4-oxadiazole 453566-97-7P, 3-(5-Chloropyrid-2-yl)-5-(3-

allyloxy-5-cyanophenyl)-1,2,4-oxadiazole 453566-98-8P,
3-(5-Chloropyrid-2-yl)-5-(3-cyano-5-propoxyphenyl)-1,2,4-oxadiazole
453566-99-9P, 3-(5-Chloropyrid-2-yl)-5-(3-cyano-5-ethoxyphenyl)-1,2,4-
oxadiazole 453567-00-5P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-
hexyloxyphenyl)-1,2,4-oxadiazole 453567-01-6P,
3-(5-Fluoropyrid-2-yl)-5-[3-cyano-5-(methoxymethyl)phenyl]-1,2,4-
oxadiazole 453567-02-7P, 3-(5-Fluoropyrid-2-yl)-5-(5-cyano-2-
methoxyphenyl)-1,2,4-oxadiazole 453567-03-8P, 5-(5-Cyano-2-
methoxyphenyl)-3-(5-cyanopyrid-2-yl)-1,2,4-oxadiazole 453567-07-2P,
3-(3-Cyano-5-methylphenyl)-5-(2-pyridyl)-1,2,4-oxadiazole 453567-11-8P,
3-(3-Cyanophenyl)-5-(2-pyridyl)-1,2,4-oxadiazole 453567-12-9P,
3-(3-Cyano-5-dimethylaminophenyl)-5-(2-pyridyl)-1,2,4-oxadiazole
453567-13-0P, 3-(3-Cyano-5-methylphenyl)-5-(5-fluoropyrid-2-yl)-1,2,4-
oxadiazole 453567-14-1P, 3-(3-Cyano-5-fluorophenyl)-5-(5-fluoropyrid-2-
yl)-1,2,4-oxadiazole 453567-15-2P, 5-(4-Cyanophenyl)-3-(6-cyanopyrid-2-
yl)-1,2,4-oxadiazole 453567-16-3P, 5-(3-Cyano-5-trifluoromethoxyphenyl)-
3-(2-pyridyl)-1,2,4-oxadiazole 453567-17-4P, 5-(3-Methoxycarbonyl-5-
trifluoromethoxyphenyl)-3-(2-pyridyl)-1,2,4-oxadiazole 453567-18-5P,
5-(3-Cyano-5-trifluoromethoxyphenyl)-3-(5-fluoropyrid-2-yl)-1,2,4-
oxadiazole 453567-19-6P, 3-(5-Cyanopyrid-2-yl)-5-(3-cyano-5-
trifluoromethoxyphenyl)-1,2,4-oxadiazole 453567-20-9P,
3-(3-Cyano-5-dimethylaminophenyl)-5-(5-fluoropyrid-2-yl)-1,2,4-oxadiazole
453567-21-0P, 5-(5-Chloropyrid-2-yl)-3-(3-cyano-5-methoxyphenyl)-1,2,4-
oxadiazole 453567-22-1P, 5-(5-Chloropyrid-2-yl)-3-(3-cyano-5-
dimethylaminophenyl)-1,2,4-oxadiazole 453567-23-2P, 5-(5-Chloropyrid-2-
yl)-3-(6-cyano-4-methoxypyrid-2-yl)-1,2,4-oxadiazole 453567-24-3P,
5-(5-Chloropyrid-2-yl)-3-(6-cyano-4-hydroxypyrid-2-yl)-1,2,4-oxadiazole
453567-25-4P, 5-(5-Chloropyrid-2-yl)-3-(3-cyano-5-trifluoromethoxyphenyl)-
1,2,4-oxadiazole 453567-27-6P, 5-(5-Chloropyrid-2-yl)-3-(3-cyanophenyl)-
1,2,4-oxadiazole 453567-28-7P, 5-(5-Chloropyrid-2-yl)-3-(3-cyano-5-
methylphenyl)-1,2,4-oxadiazole 453567-29-8P, 5-(5-Chloropyrid-2-yl)-3-(3-
cyano-5-fluorophenyl)-1,2,4-oxadiazole 453567-30-1P,
3-(3-Cyano-5-trifluoromethoxyphenyl)-5-(2-pyridyl)-1,2,4-oxadiazole
453567-31-2P, 3-(3-Fluoro-5-methoxyphenyl)-5-(2-pyridyl)-1,2,4-oxadiazole
453567-32-3P, 3-(3-Cyanophenyl)-5-(5-fluoropyrid-2-yl)-1,2,4-oxadiazole
453567-33-4P, 3-(3-Cyano-5-trifluoromethoxyphenyl)-5-(5-fluoropyrid-2-yl)-
1,2,4-oxadiazole 453567-34-5P, 3-(3-Fluoro-5-methoxyphenyl)-5-(5-
fluoropyrid-2-yl)-1,2,4-oxadiazole 453567-35-6P, 3-(3,5-Dimethoxyphenyl)-
5-(5-fluoropyrid-2-yl)-1,2,4-oxadiazole 453567-37-8P,
3-(5-Fluoro-2-pyridyl)-5-[3-bromo-5-(3-pyridyl)phenyl]-1,2,4-oxadiazole
453567-38-9P, 3-(5-Fluoro-2-pyridyl)-5-(3-fluoro-5-methoxyphenyl)-1,2,4-
oxadiazole 453567-39-0P, 3-(Pyrid-2-yl)-5-[3-cyano-5-(methylthio)phenyl]-
1,2,4-oxadiazole 453567-40-3P, 3-(5-Fluoropyrid-2-yl)-5-[3-cyano-5-
(methylthio)phenyl]-1,2,4-oxadiazole 453567-42-5P, 3-(Pyrid-2-yl)-5-[3-
fluoro-5-(methylsulfinyl)phenyl]-1,2,4-oxadiazole 453567-43-6P,
3-(Pyrid-2-yl)-5-[3-fluoro-5-(ethylthio)phenyl]-1,2,4-oxadiazole
453567-45-8P, 3-(Pyrid-2-yl)-5-[5-fluoro-3-(tert-butylthio)phenyl]-1,2,4-
oxadiazole 453567-46-9P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-
methylphenyl)-1,2,4-oxadiazole 453567-47-0P, 3-(5-Cyanopyrid-2-yl)-5-(3-
cyano-5-methylphenyl)-1,2,4-oxadiazole 453567-48-1P,
3-(5-Fluoropyrid-2-yl)-5-(4-cyano-2-thienyl)-1,2,4-oxadiazole
453567-49-2P, 3-(2-Pyridyl)-5-(5-cyano-2-methoxyphenyl)-1,2,4-oxadiazole
453567-50-5P, 3-(2-Pyridyl)-5-(2-cyano-5-methoxyphenyl)-1,2,4-oxadiazole
453567-51-6P, 3-(2-Pyridyl)-5-(5-cyanopyrid-3-yl)-1,2,4-oxadiazole
453567-52-7P, 3-(2-Pyridyl)-5-[3-cyano-5-(methoxycarbonyl)phenyl]-1,2,4-
oxadiazole 453567-54-9P, 3-(5-Fluoro-2-pyridyl)-5-(3-cyano-5-
trifluoromethylphenyl)-1,2,4-oxadiazole 453567-56-1P,
3-(2-Pyridyl)-5-[3-cyano-5-(4-pyridyl)phenyl]-1,2,4-oxadiazole
453567-57-2P, 3-(2-Pyridyl)-5-[2-methoxy-5-(4-pyridyl)phenyl]-1,2,4-
oxadiazole 453567-58-3P, 3-(2-Pyridyl)-5-[2-fluoro-5-(4-pyridyl)phenyl]-
1,2,4-oxadiazole 453567-59-4P, 3-(2-Pyridyl)-5-[3-fluoro-5-(4-
pyridyl)phenyl]-1,2,4-oxadiazole 453567-60-7P, 3-(2-Pyridyl)-5-[3-fluoro-
5-(3-pyridyl)phenyl]-1,2,4-oxadiazole 453567-61-8P, 3-(2-Pyridyl)-5-[2-

fluoro-5-(3-pyridyl)phenyl]-1,2,4-oxadiazole 453567-62-9P,
3-(2-Pyridyl)-5-[2-methoxy-5-(3-pyridyl)phenyl]-1,2,4-oxadiazole
453567-63-0P, 3-(2-Pyridyl)-5-[3-cyano-5-(3-pyridyl)phenyl]-1,2,4-
oxadiazole 453567-64-1P, 3-(5-Fluoropyrid-2-yl)-5-[5-(3-pyridyl)pyrid-3-
yl]-1,2,4-oxadiazole 453567-65-2P, 3-(2-Pyridyl)-5-[5-(3-pyridyl)pyrid-3-
yl]-1,2,4-oxadiazole 453567-66-3P, 3-(5-Cyanopyrid-2-yl)-5-[3-(pyrid-3-
yl)phenyl]-1,2,4-oxadiazole 453567-67-4P, 3-(5-Cyanopyrid-2-yl)-5-[3-
(pyrid-3-yl)phenyl]-1,2,4-oxadiazole dihydrochloride 453567-68-5P,
3-(5-Cyanopyrid-2-yl)-5-[3-fluoro-5-(pyrid-3-yl)phenyl]-1,2,4-oxadiazole
453567-69-6P, 3-(5-Cyanopyrid-2-yl)-5-[3-fluoro-5-(pyrid-3-yl)phenyl]-
1,2,4-oxadiazole dihydrochloride 453567-70-9P, 3-(2-Pyridyl)-5-[3-(3-
fluorophenyl)-5-fluorophenyl]-1,2,4-oxadiazole 453567-71-0P,
3-(2-Pyridyl)-5-[3-cyano-5-(3-thienyl)phenyl]-1,2,4-oxadiazole
453567-72-1P, 3-(2-Pyridyl)-5-[5-(3-thienyl)pyrid-3-yl]-1,2,4-oxadiazole
453567-73-2P, 3-(2-Pyridyl)-5-[5-(3-furyl)pyrid-3-yl]-1,2,4-oxadiazole
453567-74-3P, 3-(2-Pyridyl)-5-[5-(5-phenylpyrid-3-yl)-1,2,4-oxadiazole
453567-75-4P, 3-(2-Pyridyl)-5-[5-(3-methoxyphenyl)pyrid-3-yl]-1,2,4-
oxadiazole 453567-76-5P, 3-(2-Pyridyl)-5-[3-cyano-5-(5-pyrimidyl)phenyl]-
1,2,4-oxadiazole 453567-77-6P, 3-(2-Pyridyl)-5-[3-cyano-5-(3-
aminophenyl)phenyl]-1,2,4-oxadiazole 453567-78-7P, 3-(2-Pyridyl)-5-[3-
cyano-5-(3-fluorophenyl)phenyl]-1,2,4-oxadiazole 453567-79-8P,
3-(2-Pyridyl)-5-[5-(5-pyrimidyl)pyrid-3-yl]-1,2,4-oxadiazole
453567-80-1P, 3-(5-Fluoropyrid-2-yl)-5-[3-(3-pyridyl)phenyl]-1,2,4-
oxadiazole 453567-82-3P, 5-[2-Methyl-6-(3-pyridyl)pyrid-4-yl]-3-(2-
pyridyl)-1,2,4-oxadiazole 453567-83-4P, 5-[2-Methoxy-6-(3-pyridyl)pyrid-
4-yl]-3-(2-pyridyl)-1,2,4-oxadiazole 453567-84-5P, 5-(2-Pyridyl)-3-[5-(3-
pyridyl)pyrid-3-yl]-1,2,4-oxadiazole 453567-85-6P, 5-(2-Pyridyl)-3-[3-(3-
pyridyl)phenyl]-1,2,4-oxadiazole 453567-86-7P, 5-(2-Pyridyl)-3-[3-(3-
pyridyl)phenyl]-1,2,4-oxadiazole hydrochloride 453567-87-8P,
5-(5-Fluoropyrid-2-yl)-3-[3-fluoro-5-(3-pyridyl)phenyl]-1,2,4-oxadiazole
453567-90-3P, 3-(2-Pyridyl)-5-[3-cyano-5-(2-pyridyl)phenyl]-1,2,4-
oxadiazole 453567-91-4P, 3-(2-Pyridyl)-5-[2-methoxy-5-(2-pyridyl)phenyl]-
1,2,4-oxadiazole 453567-92-5P, 3-(2-Pyridyl)-5-[2-fluoro-5-(2-
pyridyl)phenyl]-1,2,4-oxadiazole 453567-93-6P, 3-(2-Pyridyl)-5-(3-
aminomethyl-5-cyanophenyl)-1,2,4-oxadiazole 453567-95-8P,
3-(2-Pyridyl)-5-[5-(prop-1-en-2-yl)pyrid-3-yl]-1,2,4-oxadiazole
453567-97-0P, 3-(2-Pyridyl)-5-[3-cyano-5-(2-hydroxyethyl)phenyl]-1,2,4-
oxadiazole 453567-98-1P, 3-(2-Pyridyl)-5-[3-cyano-5-(2,3-
dichloropropoxy)phenyl]-1,2,4-oxadiazole 453568-03-1P,
3-(2-Pyridyl)-5-(3-cyano-5-methoxyphenyl)-1,2,4-oxadiazole 453568-06-4P,
3-(2-Pyridyl)-5-[3-cyano-5-[2-(N,N-dimethylamino)ethoxy]phenyl]-1,2,4-
oxadiazole 453568-07-5P, 3-(2-Pyridyl)-5-[3-cyano-5-[3-(N,N-
dimethylamino)propoxy]phenyl]-1,2,4-oxadiazole 453568-08-6P,
3-(2-Pyridyl)-5-[3-cyano-5-(2-aminoethoxy)phenyl]-1,2,4-oxadiazole
453568-09-7P, 3-(2-Pyridyl)-5-(3-cyano-5-propoxyphenyl)-1,2,4-oxadiazole
453568-10-0P, 3-(2-Pyridyl)-5-[5-cyano-3-(3-hydroxypropyn-1-yl)phenyl]-
1,2,4-oxadiazole 453568-11-1P, 3-(2-Pyridyl)-5-[5-(N-benzyl-1,2,5,6-
tetrahydropyridin-3-yl)pyrid-3-yl]-1,2,4-oxadiazole 453568-13-3P,
3-(2-Pyridyl)-5-[2-(N-methylamino)phenyl]-1,2,4-oxadiazole 453568-14-4P,
3-(2-Pyridyl)-5-[3-cyano-5-(2-hydroxyethoxy)phenyl]-1,2,4-oxadiazole
453568-15-5P, 3-(2-Pyridyl)-5-(3-cyano-5-isopropoxyphenyl)-1,2,4-
oxadiazole 453568-16-6P, 3-(2-Pyridyl)-5-(3-cyano-5-ethoxyphenyl)-1,2,4-
oxadiazole 453568-17-7P, 3-(2-Pyridyl)-5-[3-cyano-5-(2,2,2-
trifluoroethoxy)phenyl]-1,2,4-oxadiazole 453568-18-8P,
3-(2-Pyridyl)-5-(3-cyano-5-cyclopropylmethoxyphenyl)-1,2,4-oxadiazole
453568-19-9P, 3-(2-Pyridyl)-5-(3-amino-5-cyanophenyl)-1,2,4-oxadiazole
453568-21-3P, 3-(2-Pyridyl)-5-[3-cyano-5-(trifluoromethylsulfonyloxy)phenyl]-
1,2,4-oxadiazole 453568-22-4P, 3-(2-Pyridyl)-5-[3-cyano-5-(2-methoxy-
2-oxoethoxy)phenyl]-1,2,4-oxadiazole 453568-23-5P, 3-(2-Pyridyl)-5-[3-
cyano-5-(2-tert-butoxy-2-oxoethoxy)phenyl]-1,2,4-oxadiazole
453568-24-6P, 3-(2-Pyridyl)-5-[3-cyano-5-(methoxymethoxy)phenyl]-1,2,4-
oxadiazole 453568-25-7P, 3-(2-Pyridyl)-5-[3-cyano-5-(2-
methoxyethoxy)phenyl]-1,2,4-oxadiazole 453568-26-8P,

3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-cyclopentylaminophenyl)-1,2,4-oxadiazole 453568-27-9P, 3-(2-Pyridyl)-5-(3-cyano-5-hexyloxyphenyl)-1,2,4-oxadiazole 453568-28-0P, 3-(2-Pyridyl)-5-[3-cyano-5-[[dimethylamino]carbonyl]oxy]phenyl]-1,2,4-oxadiazole 453568-29-1P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-ethylaminophenyl)-1,2,4-oxadiazole 453568-30-4P, 3-(5-Fluoropyrid-2-yl)-5-(3-cyano-5-diethylaminophenyl)-1,2,4-oxadiazole 453568-32-6P, 5-[3-Fluoro-5-(1-methyl-1H-tetrazol-5-yl)phenyl]-3-(5-fluoropyrid-2-yl)-1,2,4-oxadiazole 453568-33-7P, 3-(5-Fluoro-2-pyridyl)-5-[3-(1-benzyl-1,2,5,6-tetrahydropyridin-3-yl)-5-fluorophenyl]-1,2,4-oxadiazole 453568-34-8P, 3-(5-Fluoro-2-pyridyl)-5-[3-fluoro-5-(1H-imidazol-4-yl)phenyl]-1,2,4-oxadiazole 453568-36-0P, 1-(3-Cyanophenyl)-4-(5-fluoro-2-pyridyl)-1H-imidazole 453568-39-3P, 3-(2-Pyridyl)-5-[3-(1H-imidazol-1-yl)-5-(methylthio)phenyl]-1,2,4-oxadiazole 453568-40-6P, 3-(2-Pyridyl)-5-[3-(1H-imidazol-1-yl)-5-(methylthio)phenyl]-1,2,4-oxadiazole hydrochloride 453568-41-7P, 3-[3-Cyano-5-(1H-imidazol-1-yl)phenyl]-5-(2-pyridyl)-1,2,4-oxadiazole 453568-42-8P, 3-[3-Cyano-5-(1H-imidazol-1-yl)phenyl]-5-(2-pyridyl)-1,2,4-oxadiazole hydrochloride 453568-43-9P, 453568-44-0P, 3-(2-Pyridyl)-5-[3-cyano-5-(1H-imidazol-1-yl)phenyl]-1,2,4-oxadiazole hydrochloride 453568-46-2P, 2-(3-Cyanophenyl)-4-(pyridin-2-yl)-1,3-thiazole 453568-47-3P, 2-(3-Bromo-5-iodophenyl)-4-(pyridin-2-yl)-1,3-oxazole 453568-50-8P, 2-(2-Pyridyl)-5-(3-cyanophenyl)-1,3,4-oxadiazole 453568-51-9P

, 2-(2-Pyridyl)-5-(3-cyanophenyl)-1,3,4-triazole 453568-52-0P, 4-(3-Cyanophenyl)-1-(2-pyridyl)-1H-imidazole 453568-54-2P, 4-(2-Pyridyl)-1-(3-cyanophenyl)-1H-imidazole 453568-55-3P, 3-(2-Pyridyl)-2-(3-cyanophenyl)furan 453568-59-7P, 4-(5-Fluoro-2-pyridyl)-2-(3-cyanophenyl)furan 453568-61-1P, 4-(5-Chloro-2-pyridyl)-2-(3-cyanophenyl)furan 453568-62-2P, 2-(2-Pyridyl)-5-[5-fluoro-3-(1-imidazolyl)phenyl]furan 453568-65-5P, 3-[5-(2-Pyridyl)-2-furyl]benzonitrile 453568-67-7P, 3-[5-(5-Chloro-2-pyridyl)-2-furyl]benzonitrile 453568-68-8P, 3-[5-(5-Cyano-2-pyridyl)-2-furyl]benzonitrile 453568-70-2P, 3-[5-(5-Fluoro-2-pyridyl)-2-furyl]benzonitrile 453568-71-3P, 3-Fluoro-5-[5-(2-pyridyl)-2-furyl]benzonitrile 453568-73-5P, 2-(3-Cyanophenyl)-4-(5-fluoropyrid-2-yl)-1,3-oxazole 453568-74-6P, 2-(3-Cyano-5-fluorophenyl)-4-(5-fluoropyrid-2-yl)-1,3-oxazole 453568-75-7P, 2-(3-Cyano-5-fluorophenyl)-4-(2-pyridyl)-1,3-oxazole 453568-76-8P, 2-(5-Allyloxy-3-cyanophenyl)-4-(5-Fluoropyrid-2-yl)-1,3-oxazole 453568-78-0P, 2-(3-Cyano-5-methoxyphenyl)-4-(5-fluoropyrid-2-yl)-1,3-oxazole 453568-79-1P, 2-(3-Cyano-5-n-propyloxyphenyl)-4-(5-fluoropyrid-2-yl)-1,3-oxazole 453568-80-4P, 2-(3-Cyano-5-methoxyphenyl)-4-(pyrid-2-yl)-5-chloro-1,3-oxazole 453568-81-5P, 3-(Pyrid-2-yl)-5-[3-methoxy-5-(pyrid-3-yl)phenyl]-1,2,4-oxadiazole 453568-82-6P, 3-(5-Fluoropyrid-2-yl)-5-[3-(methoxycarbonyl)-5-(pyrid-3-yl)phenyl]-1,2,4-oxadiazole 453568-83-7P, 3-(5-Fluoropyrid-2-yl)-5-[3-methoxy-5-(pyrid-3-yl)phenyl]-1,2,4-oxadiazole 453568-84-8P, 3-(5-Cyanopyrid-2-yl)-5-[3-methoxy-5-(pyrid-3-yl)phenyl]-1,2,4-oxadiazole 453568-85-9P, 2-(Pyrid-2-yl)-4-(3-bromophenyl)-1,3-oxazole 453568-86-0P, 2-(Pyrid-2-yl)-4-(3-cyanophenyl)-1,3-oxazole 453568-87-1P, 2-(Pyrid-2-yl)-4-[3-(pyrid-3-yl)phenyl]-1,3-oxazole 453568-88-2P, 3-(2-Pyridyl)-5-(3-cyano-5-trifluoromethylphenyl)-1,2,4-oxadiazole
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT 1620-77-5P, 5-Methyl-2-cyanopyridine 1673-47-8P, 3-Chlorobenzhydrazide 1772-01-6P, Pyrid-2-ylamidoxime 10388-19-9P, 3-Iodobenzamide 16576-78-6P, 4-(2-Pyridyl)imidazole 19731-01-2P, 3-Cyanobenzhydrazide 20319-44-2P, Dimethyl 5-methoxyisophthalate 21368-39-8P, Dimethyl 5-(allyloxy)isophthalate 25026-64-6P, 3-Chloro-5-fluorobenzoic acid 28186-62-1P, 3-Iodo-5-trifluoromethylbenzoic acid 38180-46-0P,

2-Cyano-3-chloropyridine 46331-50-4P, 5-Methoxyisophthalic acid
55484-30-5P, 5-Bromo-2-(2-pyridyl)furan 60494-51-1P,
4-Methoxypyridine-2,6-dicarboxamide 68631-52-7P, Diethyl
4-hydroxy-2,6-pyridinedicarboxylate 71590-08-4P, 3-Methoxycarbonyl-5-
methoxybenzoic acid 72081-99-3P, Quinol-2-ylamidoxime 73647-50-4P,
3-Methoxybenzamidoxime 78621-81-5P, 3-Methyl-5-cyanobenzoic acid
88304-58-9P, 4-(3-Cyanophenyl)imidazole 89809-63-2P,
2-Cyano-5-methoxypyridine 89809-64-3P, 2-Cyano-5-chloropyridine
93116-99-5P, 3-Methoxycarbonyl-5-iodobenzoic acid 97509-75-6P,
2-Cyano-3-fluoropyridine 98556-65-1P, 3-Cyano-5-nitrobenzoic acid
106748-26-9P, 3-Iodothiobenzamide 153684-73-2P, 4-(2-Pyridyl)-1-trityl-
1H-imidazole 176548-72-4P, 3-Fluoro-5-methoxybenzoic acid
188813-07-2P, Methyl 3-bromo-5-iodobenzoate 199536-01-1P, Methyl
3-amino-5-cyanobenzoate 208934-35-4P, 4-(Tributylstannyl)-1-trityl-1H-
imidazole 327056-55-3P, 5-Chloropyrid-2-ylamidoxime 327056-58-6P,
5-Fluoropyrid-2-ylamidoxime 327056-62-2P, 2-Cyano-5-fluoropyridine
327056-65-5P, 5-Methoxypyrid-2-ylamidoxime 327056-66-6P,
3-Fluoropyrid-2-ylamidoxime 327056-71-3P, 3-Chloro-5-cyanobenzoic acid
327056-72-4P, Methyl 3-chloro-5-cyanobenzoate 327056-73-5P,
3-Chloro-5-fluorobenzonitrile 327056-74-6P, 3-Fluoro-5-cyanobenzoic acid
327056-75-7P, Methyl 3-chloro-5-fluorobenzoate 334792-52-8P, Methyl
3-bromo-5-fluorobenzoate 439280-18-9P, 3-Fluoro-5-methoxybenzonitrile
453565-47-4P, 5-Methylpyrid-2-ylamidoxime 453565-48-5P,
5-Cyanopyrid-2-ylamidoxime 453565-49-6P, 5-(tert-Butoxycarbonyl)pyrid-2-
ylamidoxime 453565-50-9P, 5-tert-Butoxycarbonyl-2-cyanopyridine
453565-51-0P, 3-Cyano-5-methoxyphenylamidoxime 453565-52-1P,
5-Methoxyisophthalamide 453565-53-2P, 5-Methoxyisophthalonitrile
453565-54-3P, 3-Cyano-5-fluorophenylamidoxime 453565-56-5P,
5-Bromopyrid-3-ylamidoxime 453565-57-6P, 3-Cyano-5-methylphenylamidoxime
453565-58-7P, 3-Cyanophenylamidoxime 453565-59-8P, 3-Iodophenylamidoxime
453565-60-1P, 3-Cyano-5-dimethylaminophenylamidoxime 453565-61-2P,
6-Cyanopyrid-2-ylamidoxime 453565-62-3P, 3-Bromo-5-fluorophenylamidoxime
453565-63-4P, 3-Fluoro-5-methoxyphenylamidoxime 453565-64-5P,
5-Fluoro-3-(methylthio)benzoic acid 453565-65-6P,
3-Fluoro-5-(1H-imidazol-1-yl)benzoic acid 453565-66-7P,
3-Allyloxy-5-cyanobenzoic acid 453565-67-8P, 3-Allyloxy-5-
(methoxycarbonyl)benzoic acid 453565-68-9P, Methyl 3-(allyloxy)-5-
(aminocarbonyl)benzoate 453565-69-0P, Methyl 3-(allyloxy)-5-
cyanobenzoate 453565-70-3P, 3-Cyano-5-propoxybenzoic acid
453565-71-4P, Methyl 3-(aminocarbonyl)-5-propoxybenzoate 453565-72-5P,
Methyl 3-cyano-5-propoxybenzoate 453565-73-6P, 3-Cyano-5-
dimethylaminobenzoic acid 453565-74-7P, Methyl 3-cyano-5-
dimethylaminobenzoate 453565-75-8P, 3-Cyano-5-(2-methoxyethoxy)benzoic
acid 453565-76-9P, Methyl 3-cyano-5-hydroxybenzoate 453565-77-0P,
Methyl 3-cyano-5-(2-methoxyethoxy)benzoate 453565-78-1P,
3-Cyano-5-(1H-imidazol-1-ylmethyl)benzoic acid 453565-80-5P, Methyl
3-(imidazol-1-ylmethyl)-5-iodobenzoate 453565-81-6P, Methyl
3-cyano-5-(1H-imidazol-1-ylmethyl)benzoate 453565-82-7P,
3-Cyano-5-(methoxymethyl)benzoic acid 453565-83-8P, Methyl
3-(methoxymethyl)-5-iodobenzoate 453565-84-9P, Methyl
3-cyano-5-(methoxymethyl)benzoate 453565-85-0P, 3-Cyano-5-ethoxybenzoic
acid 453565-86-1P, Methyl 3-cyano-5-ethoxybenzoate 453565-87-2P,
3-Cyano-5-hexyloxybenzoic acid 453565-88-3P, Methyl 3-cyano-5-
hexyloxybenzoate 453565-89-4P, 4-Amino-3-bromo-5-trifluoromethoxybenzoic
acid 453565-90-7P, 3-Bromo-5-trifluoromethoxybenzoic acid
453565-91-8P, 3-Cyano-5-trifluoromethoxybenzoic acid 453565-93-0P,
3-Fluoro-5-(3-pyridyl)benzoic acid 453565-94-1P, Methyl
3-fluoro-5-(3-pyridyl)benzoate 453565-95-2P, 3-Fluoro-5-(3-
pyridyl)benzoic acid hydrochloride 453565-96-3P, 3-Bromo-5-(3-
pyridyl)benzoic acid 453565-97-4P, Methyl 3-bromo-5-(3-pyridyl)benzoate
453565-98-5P, 3-Bromo-5-(3-pyridyl)benzoic acid hydrochloride
453565-99-6P, 3-Cyano-5-(methylthio)benzoic acid 453566-01-3P,
3-Bromo-5-(methylthio)benzoic acid methyl ester 453566-02-4P,

3-Cyano-5-(methylthio)benzoic acid methyl ester 453566-03-5P,
 5-Fluoro-3-(methylthio)bromobenzene 453566-04-6P, 5-Fluoro-3-
 cyano(methylthio)benzene 453566-05-7P, 5-Fluoro-3-(ethylthio)benzoic
 acid 453566-06-8P, 5-Fluoro-3-(ethylthio)bromobenzene 453566-07-9P,
 5-Fluoro-3-cyano(ethylthio)benzene 453566-08-0P, 3,5-
 Dimethoxyphenylamidoxime 453566-09-1P, 3-Fluoro-5-(1H-imidazol-1-
 yl)phenylamidoxime 453566-11-5P, 6-Cyano-4-methoxypyrid-2-ylamidoxime
 453566-12-6P, Diethyl 4-methoxy-2,6-pyridinedicarboxylate 453566-13-7P,
 2,6-Dicyano-4-methoxypyridine 453566-14-8P, 3-Bromo-5-cyanobenzoic acid
 453566-15-9P, Methyl 3-bromo-5-cyanobenzoate 453566-16-0P,
 3-Cyano-5-iodobenzoic acid 453566-17-1P, 3-Methoxycarbonyl-5-
 iodobenzamide 453566-18-2P, Methyl 3-cyano-5-iodobenzoate
 453566-21-7P, N-[(2,5,6-Trifluorobenzoyl)oxyl]pyridine-2-carboximidamide
 453566-25-1P, 3-(5-tert-Butoxycarbonyl-2-pyridyl)-5-(3-cyanophenyl)-1,2,4-
 oxadiazole 453566-26-2P, 3-(5-Hydroxycarbonylpyrid-2-yl)-5-(3-
 cyanophenyl)-1,2,4-oxadiazole 453566-28-4P, 3-(5-tert-Butoxycarbonyl-2-
 pyridyl)-5-(3-bromophenyl)-1,2,4-oxadiazole 453566-29-5P,
 3-(5-Hydroxycarbonylpyrid-2-yl)-5-(3-bromophenyl)-1,2,4-oxadiazole
 453566-31-9P, 3-(5-tert-Butoxycarbonyl-2-pyridyl)-5-(3-cyano-5-
 fluorophenyl)-1,2,4-oxadiazole 453566-33-1P, 3-(5-tert-Butoxycarbonyl-2-
 pyridyl)-5-(3-bromo-5-fluorophenyl)-1,2,4-oxadiazole 453566-47-7P,
 3-Cyano-5-methylbenzamide 453567-53-8P, 3-(2-Pyridyl)-5-(3-iodo-5-
 trifluoromethylphenyl)-1,2,4-oxadiazole 453567-55-0P,
 3-(5-Fluoro-2-pyridyl)-5-(3-iodo-5-trifluoromethylphenyl)-1,2,4-oxadiazole
 453567-89-0P, 3-(3-Bromo-5-fluorophenyl)-5-(5-fluoropyrid-2-yl)-1,2,4-
 oxadiazole 453567-94-7P, 3-(2-Pyridyl)-5-(3-bromomethyl-5-cyanophenyl)-
 1,2,4-oxadiazole 453568-00-8P, 3-(2-Pyridyl)-5-(3-allyloxy-5-
 carboxamidophenyl)-1,2,4-oxadiazole 453568-12-2P, 5-(N-Benzyl-1,2,5,6-
 tetrahydropyridin-3-yl)pyridine-3-carboxylic acid ethyl ester
 453568-35-9P, 3-(5-Fluoro-2-pyridyl)-5-[3-fluoro-5-(1-trityl-1H-imidazol-4-
 yl)phenyl]-1,2,4-oxadiazole 453568-37-1P, 4-(5-Fluoro-2-pyridyl)-1-
 trityl-1H-imidazole 453568-38-2P, 4-(5-Fluoro-2-pyridyl)imidazole
 hydrochloride 453568-49-5P, N-Picolinoyl-N'-(3-
 iodobenzoyl)hydrazine 453568-53-1P, 4-(3-Cyanophenyl)-1-trityl-1H-
 imidazole 453568-56-4P, 3-[Hydroxy[3-[(tetrahydropyran-2-yl)oxy]prop-1-
 ynyl]methyl]benzonitrile 453568-57-5P, 3-[(3-Hydroxyprop-1-
 ynyl)carbonyl]benzonitrile 453568-58-6P, 3-Bromo-2-(3-cyanophenyl)furan
 453568-63-3P, 1-(3-Bromo-5-fluorophenyl)-1H-imidazole 453568-72-4P,
 3-(5-Bromofuran-2-yl)-5-fluorobenzonitrile
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(intermediate; preparation of pyridyl- and phenyl-substituted oxadiazoles
 and analogs as metabotropic glutamate receptor antagonists for
 inhibiting neuronal damage)

IT 67-64-1, Acetone, reactions 75-30-9, 2-Iodopropane 79-44-7,
 DimethylcarbamyI chloride 96-32-2, Methyl bromoacetate 98-80-6,
 Phenylboronic acid 98-98-6, Picolinic acid 99-64-9,
 3-Dimethylaminobenzoic acid 100-39-0, Benzyl bromide 100-70-9,
 2-Cyanopyridine 106-95-6, Allyl bromide, reactions 107-08-4, Propyl
 iodide 107-19-7, Propargyl alcohol 109-04-6, 2-Bromopyridine
 111-25-1, 1-Bromohexane 118-48-9, Isatoic anhydride 118-61-6, Ethyl
 salicylate 120-92-3, Cyclopentanone 138-60-3, Chelidamic acid
 288-32-4, Imidazole, reactions 353-83-3, 2-Iodo-1,1,1-trifluoroethane
 402-31-3, 3,5-Bis(trifluoromethyl)benzene 403-54-3, 3-Fluorobenzonitrile
 461-96-1, 1-Bromo-3,5-difluorobenzene 535-80-8, 3-Chlorobenzoic acid
 579-18-0, 3-Benzoylbenzoic acid 609-65-4, 2-Chlorobenzoyl chloride
 618-46-2, 3-Chlorobenzoyl chloride 618-48-4, 3-Chlorobenzamide
 618-51-9, 3-Iodobenzoic acid 626-17-5, Isophthalonitrile 627-42-9,
 2-Chloroethyl methyl ether 657-06-7, 2-Chloro-5-(trifluoromethyl)benzoic
 acid 768-35-4, 3-Fluorophenylboronic acid 879-18-5, 1-Naphthoyl
 chloride 1436-43-7, 2-Quinolinecarbonitrile 1461-22-9, Tributyltin
 chloride 1521-38-6, 2,3-Dimethoxybenzoic acid 1527-89-5,
 3-Methoxybenzonitrile 1692-15-5, 4-Pyridylboronic acid 1711-05-3,

3-Anisoyl chloride 1711-06-4, 3-Toluoyl chloride 1711-07-5,
3-Fluorobenzoyl chloride 1711-09-7, 3-Bromobenzoyl chloride 1711-11-1,
3-Cyanobenzoyl chloride 1877-72-1, 3-Cyanobenzoic acid 1955-46-0,
Monomethyl 5-nitroisophthalate 2251-65-2, 3-(Trifluoromethyl)benzoyl
chloride 2358-29-4, 2,5,6-Trifluorobenzoic acid 2402-77-9,
2,3-Dichloropyridine 2476-35-9, 5-Bromo-2-methoxybenzoic acid
2893-33-6, 2,6-Dicyanopyridine 2905-60-4, 2,3-Dichlorobenzoyl chloride
2905-62-6, 3,5-Dichlorobenzoyl chloride 2905-67-1, Methyl
3,5-dichlorobenzoate 3222-49-9, 5-Methylnicotinic acid 3438-16-2,
5-Chloro-o-anisic acid 3510-66-5, 2-Bromo-5-methylpyridine 3739-38-6,
3-Phenoxybenzoic acid 4068-78-4, Methyl 5-chloro-2-hydroxybenzoate
4584-46-7, 2-Dimethylaminoethyl chloride hydrochloride 4743-17-3,
5-Chloroisatoic anhydride 5292-43-3, tert-Butyl bromoacetate
5407-04-5, 3-Dimethylaminopropyl chloride hydrochloride 6068-72-0,
4-Cyanobenzoyl chloride 6089-04-9, Tetrahydro-2-(2-propynyloxy)-2H-pyran
6165-69-1, 3-Thiopheneboronic acid 7051-34-5, (Bromomethyl)cyclopropane
10328-92-4, N-Methylisatoic acid anhydride 10365-98-7,
3-Methoxyphenylboronic acid 10401-11-3, 3-Hydroxyphenylacetylene
13036-02-7, Dimethyl 5-hydroxyisophthalate 13737-05-8,
Pyrid-2-yltrimethylstannane 15855-06-8, 2-Chloro-6-methoxyisonicotinic
acid 16110-09-1, 2,5-Dichloropyridine 17213-57-9, 3,5-Dimethoxybenzoyl
chloride 17997-47-6, Tri-n-butyl(2-pyridyl)tin 18355-73-2,
2,3-Difluorobenzoyl chloride 19179-31-8, 3,5-Dimethoxybenzonitrile
20730-07-8, 2,5-Dicyanopyridine 20826-04-4, 5-Bromonicotinic acid
22620-27-5, 5-Chloronicotinic acid 22726-00-7, 3-Bromobenzamide
22921-68-2, 2-Bromo-5-methoxybenzoic acid 24964-64-5,
3-Cyanobenzaldehyde 25462-85-5, 2-Chloro-6-methylisonicotinic acid
26690-80-2, N-(tert-Butoxycarbonyl)ethanolamine 30418-59-8,
3-Aminophenylboronic acid 30766-22-4, 5-Hydroxynicotinic acid methyl
ester 31301-51-6, 2-Chloro-5-fluoropyridine 33863-76-2,
1-Bromo-3-chloro-5-fluorobenzene 35590-37-5, 5-Bromonicotinonitrile
35730-09-7, 2,5-Difluorobenzoyl chloride 39115-94-1, 3-Iodobenzhydrazide
39718-07-5, 3,5-Dicyanotoluene 40086-66-6, 2-Bromoacetylpyridine
40114-49-6, N-Benzyl-3-piperidinone 40473-01-6, 5-Chloro-2-bromopyridine
41404-58-4, 5-Fluoro-2-bromopyridine 51546-12-4, 2-Chloro-5-
(methylthio)benzoic acid 51839-15-7, Dimethyl 5-iodoisophthalate
55484-03-2, 2-Pyridyl-2-furan 55552-70-0, 3-Furylboronic acid
58123-68-5, 3,5-Dicyanobenzoic acid 64248-63-1, 3,5-Difluorobenzonitrile
69113-59-3, 3-Iodobenzonitrile 69716-28-5, Pyridine-2-carbohydroximoyl
chloride 70165-31-0, 6-Cyanonicotinic acid 74470-23-8,
2-(Methylthio)nicotinic acid 84923-71-7, 5-Cyano-2-methoxybenzoic acid
86270-03-3, 3-(Trifluoromethoxy)benzoyl chloride 87498-66-6, Potassium
6-(dimethylamino)hexyloxide 87941-55-7, 4-Bromo-1-trityl-1H-imidazole
96797-15-8, 4-Iodo-1-trityl-1H-imidazole 99066-80-5, Methyl
3-cyano-5-nitrobenzoate 109299-78-7, 5-Pyrimidylboronic acid
112598-77-3, 3-Furan-2-ylbenzonitrile 121602-93-5, 3,4,5-
Trifluorobenzoic acid 129714-97-2, 3,5-Difluorobenzoyl chloride
131534-65-1, Pyridine-3-boronic acid 1,3-propanediol ester 146328-85-0,
5-Bromo-2-fluorobenzoic acid 146328-87-2, 5-Cyano-2-fluorobenzoic acid
150255-96-2, 3-Cyanophenylboronic acid 151453-57-5, 5-
Dimethylaminoisophthalonitrile 171243-30-4, 3-Fluoro-5-
trifluoromethylbenzoyl chloride 175278-22-5, 4-Amino-3-
trifluoromethoxybenzoic acid 176548-70-2, 3-Bromo-5-fluorobenzoic acid
179898-34-1, 3-Bromo-5-fluorobenzonitrile 188815-32-9,
3-Bromo-5-iodobenzoic acid 198985-47-6, (5-Chloropyrid-2-
yl)trimethylstannane 289039-19-6, 3-Bromo-5-iodobenzamide 303997-55-9,
3-Chloro-5-trifluoromethylpyrid-2-ylamidoxime 321724-19-0,
Pyrimidyl-5-boronic acid pinacolate 406719-77-5, 4-Cyano-2-
thiophenecarboxylic acid 407623-43-2, 5-Chloropicolinic acid
hydrochloride 453565-55-4, 5-Fluoroisophthalonitrile 453565-79-2,
Methyl 3-(bromomethyl)-5-iodobenzoate 453566-00-2, 3-Bromo-5-
(methylthio)benzoic acid 453566-10-4, 3-Fluoro-5-(1H-imidazol-1-
yl)benzonitrile 453566-22-8, 5-(3-Trifluoromethanesulfonyloxyphenyl)-3-

(pyridin-2-yl)-1,2-oxazole 453566-45-5, 5-Methoxynicotinic acid hydrochloride 453566-61-5, 3-Cyano-5-methoxybenzoic acid 453566-70-6, 3-(4-Dimethylaminobutoxy)pyrid-2-ylamidoxime 453566-71-7, 3-(3-Fluoropyrid-2-yl)-5-(3-fluoro-5-cyanophenyl)-1,2,4-oxadiazole 453566-72-8, Potassium 4-(dimethylamino)butoxide 453566-74-0, 3-(5-Dimethylaminopentyloxy)pyrid-2-ylamidoxime 453566-75-1, Potassium 5-(dimethylamino)pentyloxide 453566-77-3, 3-(6-Dimethylaminohexyloxy)pyrid-2-ylamidoxime 453566-94-4, 5-Fluoropicolinic acid hydrochloride 453567-26-5, 3-Cyano-5-trifluoromethoxyphenylamidoxime 453567-44-7, 5-Fluoro-3-(tert-butylthio)benzoic acid 453568-60-0, (5-Fluoropyrid-2-yl)trimethylstannane 453568-66-6, 3-(5-Bromofuran-2-yl)benzonitrile 453568-69-9, 2-Trimethylstannyl-5-cyanopyridine
 RL: RCT (Reactant); RACT (Reactant or reagent)

(precursor; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT 327056-50-8P, 3-(2-Pyridyl)-5-(3-nitrophenyl)-1,2,4-oxadiazole
 327056-52-0P, 3-(2-Pyridyl)-5-(3-bromophenyl)-1,2,4-oxadiazole
 502422-27-7P, 2-(3,5-Dichlorophenyl)-4-(2-pyridyl)-1,3-oxazole
 502422-28-8P, 2-(3-Methoxyphenyl)-4-(2-pyridyl)-1,3-oxazole
 502422-29-9P, 2-(2-Chlorophenyl)-4-(2-pyridyl)-1,3-oxazole 502422-30-2P,
 2-(3-Trifluoromethylphenyl)-4-(2-pyridyl)-1,3-oxazole 502422-31-3P,
 2-(3-Methylphenyl)-4-(2-pyridyl)-1,3-oxazole 502422-32-4P,
 2-(1-Naphthyl)-4-(2-pyridyl)-1,3-oxazole 502422-33-5P,
 2-(3-Trifluoromethoxyphenyl)-4-(2-pyridyl)-1,3-oxazole 502422-34-6P,
 2-(2,3-Difluorophenyl)-4-(2-pyridyl)-1,3-oxazole 502422-35-7P,
 2-(2,5-Difluorophenyl)-4-(2-pyridyl)-1,3-oxazole 502422-36-8P,
 2-(3,5-Difluorophenyl)-4-(2-pyridyl)-1,3-oxazole 502422-37-9P,
 2-(3,5-Dimethoxyphenyl)-4-(2-pyridyl)-1,3-oxazole 502422-38-0P,
 2-(2,3-Dichlorophenyl)-4-(2-pyridyl)-1,3-oxazole 502422-39-1P,
 2-(3-Chloro-5-cyanophenyl)-4-(2-pyridyl)-1,3-oxazole 502422-40-4P,
 2-(3-Chloro-5-fluorophenyl)-4-(2-pyridyl)-1,3-oxazole 502422-41-5P,
 2-(3-Cyanophenyl)-4-(5-chloropyridin-2-yl)-1,3-oxazole 502422-42-6P,
 2-(3-Cyanophenyl)-4-(3-fluoropyridin-2-yl)-1,3-oxazole 502422-43-7P,
 2-(3,5-Dimethoxyphenyl)-4-(5-fluoropyridin-2-yl)-1,3-oxazole
 502422-44-8P, 2-(3-Cyanophenyl)-4-(5-methoxypyridin-2-yl)-1,3-oxazole
 502422-45-9P, 2-(3-Cyanophenyl)-4-(2-quinolinyl)-1,3-oxazole
 502422-46-0P, 2-(3-Cyanophenyl)-4-(3-chloro-5-trifluoromethylpyridin-2-yl)-
 1,3-oxazole 502422-47-1P, 2-(5-Chloro-2-methoxyphenyl)-4-(2-pyridyl)-1,3-
 oxazole 502422-48-2P, 2-(2-Chloro-5-methylthiophenyl)-4-(2-pyridyl)-1,3-
 oxazole 502422-49-3P, 2-(2-Bromo-5-methoxyphenyl)-4-(2-pyridyl)-1,3-
 oxazole 502422-50-6P, 2-(2,5,6-Trifluorophenyl)-4-(2-pyridyl)-1,3-
 oxazole 502422-51-7P, 2-(3-Nitrophenyl)-4-(2-pyridyl)-1,3-oxazole

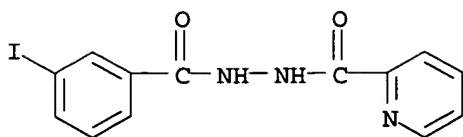
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

IT 453568-49-5P, N-Picolinoyl-N'-(3-iodobenzoyl)hydrazine
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of pyridyl- and phenyl-substituted oxadiazoles and analogs as metabotropic glutamate receptor antagonists for inhibiting neuronal damage)

RN 453568-49-5 HCAPLUS

CN 2-Pyridinecarboxylic acid, 2-(3-iodobenzoyl)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:185573 HCAPLUS
 DN 134:222632
 ED Entered STN: 16 Mar 2001
 TI 2-Pyridinecarboxaldehyde isonicotinoylhydrazone iron chelators and uses thereof
 IN Richardson, Des; Bernhardt, Paul Vincent; Becker, Erika Michelle
 PA University of Queensland, Australia; Heart Research Institute Ltd.
 SO PCT Int. Appl., 50 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-4402
 ICS A61K031-444; A61K031-443; A61K031-4436; A61P003-00; A61P007-00; A61P043-00; C07D213-53; C07D213-77; C07D401-12; C07D405-12; C07D409-12
 CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
 Section cross-reference(s): 1

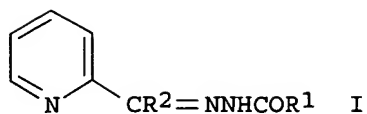
FAN.CNT 1

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PI	WO 2001017530	A1	20010315	WO 2000-AU1050	20000904 <--
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	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	CA 2383721	AA	20010315	CA 2000-2383721	20000904 <--
	EP 1212059	A1	20020612	EP 2000-962062	20000904 <--
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	JP 2003525216	T2	20030826	JP 2001-521321	20000904 <--
PRAI	AU 1999-2624	A	19990902		<--
	WO 2000-AU1050	W	20000904		<--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001017530	ICM	A61K031-4402
	ICS	A61K031-444; A61K031-443; A61K031-4436; A61P003-00; A61P007-00; A61P043-00; C07D213-53; C07D213-77; C07D401-12; C07D405-12; C07D409-12

OS MARPAT 134:222632
 GI



AB Title compds. I (R^1 = aryl, heterocyclcyl; R^2 = H, OH) were prepared by condensation of 2-pyridinecarboxaldehyde with acid hydrazides. I (R^1 = 3-bromophenyl, 2-thienyl) showed iron chelation activity greater than that of desferrioxamine, but their antiproliferative activity was unremarkable.

ST pyridinecarboxaldehyde isonicotinoylhydrazone iron chelator prepn

IT Chelating agents
(2-pyridinecarboxaldehyde isonicotinoylhydrazones)

IT Proliferation inhibition
(proliferation inhibitors; 2-pyridinecarboxaldehyde isonicotinoylhydrazones)

IT 70-51-9, Desferrioxamine 83706-03-0 257299-41-5 329183-01-9 329183-02-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(2-pyridinecarboxaldehyde isonicotinoylhydrazone iron chelators)

IT 213013-18-4P 270576-10-8P 270576-18-6P 329182-92-5P 329182-93-6P 329182-94-7P 329182-95-8P 329182-96-9P 329182-97-0P 329182-98-1P 329182-99-2P 329183-00-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(2-pyridinecarboxaldehyde isonicotinoylhydrazone iron chelators)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

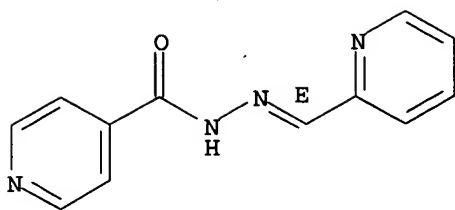
- (1) Ainscough; Journal of Inorganic Biochemistry 1999, V77(3-4), P125 HCAPLUS
- (2) Becker; The Journal of Laboratory and Clinical Medicine 1999, V134(5), P510 HCAPLUS
- (3) Capitan; 1975 HCAPLUS
- (4) Capitan; ARS PHARMACEUTICA V16(2), P293 HCAPLUS
- (5) Duggal; HCAPLUS
- (6) Gallego; The Analyst 1979, V104(1240), P613 HCAPLUS
- (7) Iki; Mikrochimica Acta 1994, V113(3-6), P137 HCAPLUS
- (8) Marutoiu; HCAPLUS
- (9) Ponka; HCAPLUS
- (10) Richardson; Acta Crystallographica 1999, VC55(12), P2102 HCAPLUS
- (11) Uehra; HCAPLUS
- (12) Zhao; HCAPLUS

IT 257299-41-5 329183-02-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(2-pyridinecarboxaldehyde isonicotinoylhydrazone iron chelators)

RN 257299-41-5 HCAPLUS

CN' 4-Pyridinecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide, stereoisomer (9CI) (CA INDEX NAME)

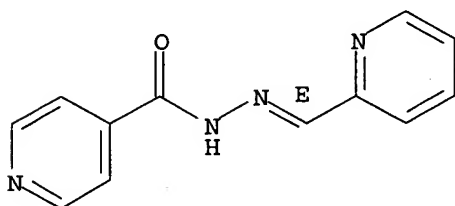
Double bond geometry as shown.



RN 329183-02-0 HCAPLUS

CN 4-Pyridinecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide,
monohydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● HCl

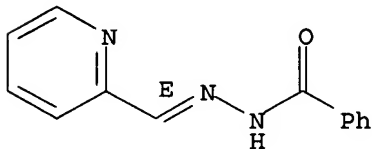
IT 270576-10-8P 270576-18-6P 329182-92-5P
329182-93-6P 329182-94-7P 329182-95-8P
329182-96-9P 329182-97-0P 329182-98-1P
329182-99-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(2-pyridinecarboxaldehyde isonicotinoylhydrazone iron chelators)

RN 270576-10-8 HCAPLUS

CN Benzoic acid, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

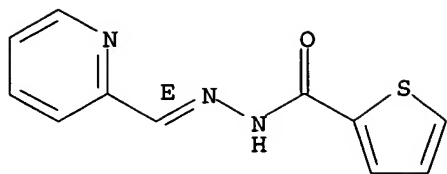
Double bond geometry as shown.



RN 270576-18-6 HCAPLUS

CN 2-Thiophenecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide (9CI)
(CA INDEX NAME)

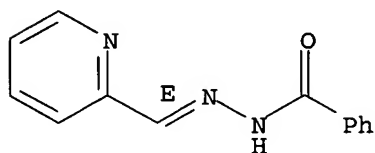
Double bond geometry as shown.



RN 329182-92-5 HCAPLUS

CN Benzoic acid, (2E)-(2-pyridinylmethylene)hydrazide, monohydrochloride
(9CI) (CA INDEX NAME)

Double bond geometry as shown.

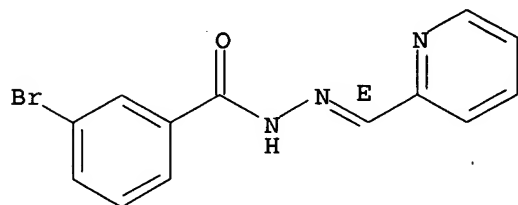


● HCl

RN 329182-93-6 HCAPLUS

CN Benzoic acid, 3-bromo-, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA
INDEX NAME)

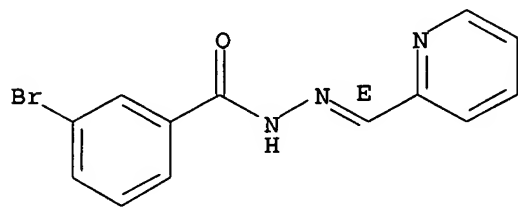
Double bond geometry as shown.



RN 329182-94-7 HCAPLUS

CN Benzoic acid, 3-bromo-, (2E)-(2-pyridinylmethylene)hydrazide,
monohydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.

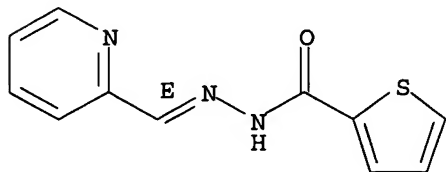


● HCl

RN 329182-95-8 HCAPLUS

CN 2-Thiophenecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide, monohydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.

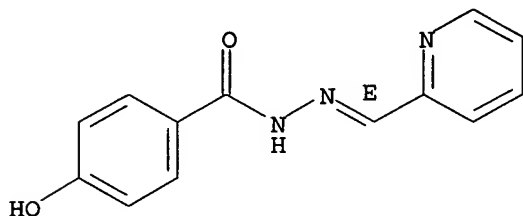


● HCl

RN 329182-96-9 HCAPLUS

CN Benzoic acid, 4-hydroxy-, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

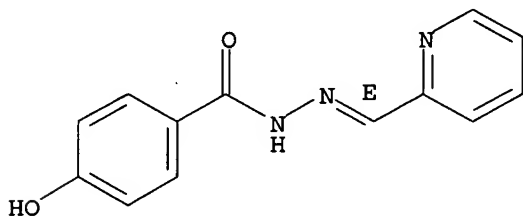
Double bond geometry as shown.



RN 329182-97-0 HCAPLUS

CN Benzoic acid, 4-hydroxy-, (2E)-(2-pyridinylmethylene)hydrazide, monohydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.

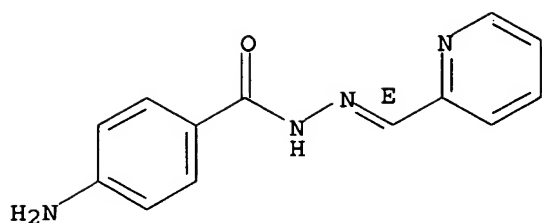


● HCl

RN 329182-98-1 HCAPLUS

CN Benzoic acid, 4-amino-, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

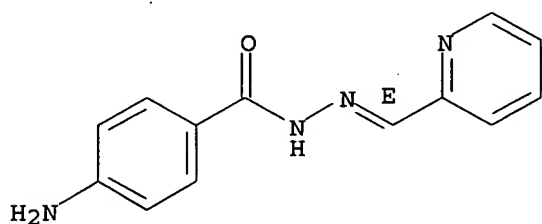
Double bond geometry as shown.



RN 329182-99-2 HCAPLUS

CN Benzoic acid, 4-amino-, (2E)-(2-pyridinylmethylene)hydrazide,
monohydrochloride (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● HCl

L52 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:228176 HCAPLUS

DN 133:256

ED Entered STN: 09 Apr 2000

TI Synthesis and analgesic activity of novel N-acylarylhydrazones and
isosters, derived from natural safrole

AU Lima, Patricia C.; Lima, Lidia M.; Da Silva, Kelli Cristine M.; Leda,
Paulo Henrique O.; De Miranda, Ana Luisa P.; Fraga, Carlos A. M.;
Barreiro, Eliezer J.

CS Instituto de Quimica, Universidade Federal do Rio de Janeiro, Rio de
Janeiro, Brazil

SO European Journal of Medicinal Chemistry (2000), 35(2), 187-203

CODEN: EJMCA5; ISSN: 0223-5234

PB Editions Scientifiques et Medicales Elsevier

DT Journal

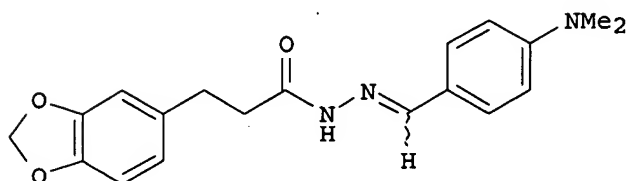
LA English

CC 1-3 (Pharmacology)

Section cross-reference(s): 28

OS CASREACT 133:256

GI



I

- AB A new series of antinociceptive compds. belonging to the N-acylarylhydrazone (NAH) class were synthesized from natural safrole. The most analgesic derivative, benzylidenemethylenedioxyphenylpropionylhydrazine I, was more potent than the stds. dipyrone and indomethacin. The arylhydrazone compds. described herein were structurally planned by mol. hybridization and classical bioisosterism strategies on previously reported analgesic NAH in order to identify the pharmacophoric contribution of the N-acylarylhydrazone moiety and investigate the structure-activity relationship (SAR) in these series. The arylhydrazones except for those derived from 3,4-methylenedioxyphenylpropanoyl hydrazide were prepared stereoselectively as the (E)-isomers.
- ST arylhydrazone stereoselective prepn; safrole derived arylhydrazone prepn analgesic activity; structure arylhydrazone deriv analgesic antinociceptive activity
- IT Structure-activity relationship
(analgesic; stereoselective preparation and analgesic activity of hydrazones derived from safrole)
- IT Hydrazones
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(aromatic; stereoselective preparation and analgesic activity of hydrazones derived from safrole)
- IT Analgesics
Stereochemistry
(stereoselective preparation and analgesic activity of hydrazones derived from safrole)
- IT 14850-85-2P 257299-41-5P 270575-91-2P 270575-92-3P
270575-93-4P 270575-94-5P 270575-95-6P 270575-96-7P 270575-97-8P
270575-98-9P 270575-99-0P 270576-00-6P 270576-01-7P 270576-02-8P
270576-03-9P 270576-04-0P 270576-05-1P 270576-07-3P 270576-08-4P
270576-09-5P 270576-10-8P 270576-12-0P 270576-14-2P
270576-16-4P 270576-18-6P 270576-20-0P 270576-22-2P
270576-24-4P 270576-27-7P 270576-29-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(stereoselective preparation and analgesic activity of hydrazones derived from safrole)
- IT 54-85-3, 4-Pyridinecarboxylic hydrazide 94-59-7, Safrole 100-10-7,
4-(Dimethylamino)benzaldehyde 100-52-7, Benzaldehyde, reactions
105-07-7, 4-Cyanobenzaldehyde 123-11-5, 4-Methoxybenzaldehyde, reactions
459-57-4, 4-Fluorobenzaldehyde 500-22-1, 3-Pyridinecarboxaldehyde
555-16-8, 4-Nitrobenzaldehyde, reactions 613-94-5 872-85-5,
4-Pyridinecarboxaldehyde 1121-60-4, 2-Pyridinecarboxaldehyde
1122-91-4, 4-Bromobenzaldehyde 2361-27-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective preparation and analgesic activity of hydrazones derived from safrole)
- IT 120-57-0P, Piperonal 120-58-1P 326-56-7P 2815-95-4P,
1,3-Benzodioxole-5-propanoic acid 7031-03-0P, 1,3-Benzodioxole-5-propanol 22026-39-7P 57906-98-6P 88368-72-3P 246033-27-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(stereoselective preparation and analgesic activity of hydrazones derived from safrole)
- RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
- RE
- (1) Barreiro, E; J Chem Res 1985, P2301
 - (2) Barreiro, E; J Pharm Sci 1992, V81, P1219 HCAPLUS
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- (16) Mahy, J; Biochemistry 1993, V32, P4014 HCAPLUS
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- (18) Palla, G; Gazz Chim Ital 1982, V112, P339 HCAPLUS
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- (21) Santos, M; J Braz Chem Soc 1997, V8, P471 HCAPLUS
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- (23) Whittle, B; Br J Pharmacol Chemother 1964, V22, P246 MEDLINE
- (24) Yamada, S; Tetrahedron Lett 1992, V33, P4329 HCAPLUS

IT 257299-41-5P 270576-10-8P 270576-18-6P

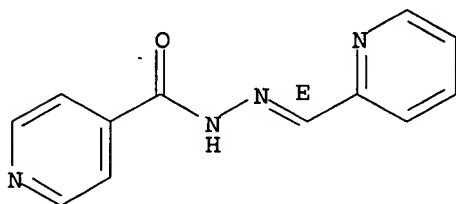
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(stereoselective preparation and analgesic activity of hydrazones derived from safrrole)

RN 257299-41-5 HCAPLUS

CN 4-Pyridinecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide, stereoisomer (9CI) (CA INDEX NAME)

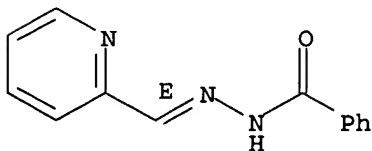
Double bond geometry as shown.



RN 270576-10-8 HCAPLUS

CN Benzoic acid, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

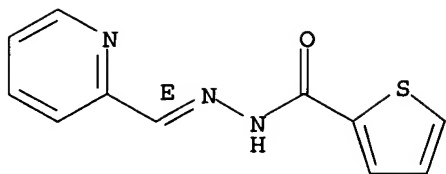
Double bond geometry as shown.



RN 270576-18-6 HCAPLUS

CN 2-Thiophenecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L52 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:72793 HCAPLUS
 DN 132:202643
 ED Entered STN: 30 Jan 2000
 TI Cytotoxicity of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes: quantitative structure-activity relationships
 AU Ainscough, Eric W.; Brodie, Andrew M.; Denny, William A.; Finlay, Graeme J.; Gothe, Scott A.; Ranford, John D.
 CS Department of Chemistry, Institute of Fundamental Sciences, Massey University, Palmerston North, N. Z.
 SO Journal of Inorganic Biochemistry (1999), 77(3-4), 125-133
 CODEN: JIBIDJ; ISSN: 0162-0134
 PB Elsevier Science Inc.
 DT Journal
 LA English
 CC 1-3 (Pharmacology)
 Section cross-reference(s): 78, 79
 AB A series of salicylaldehyde benzoylhydrazone derivs., their copper(II) complexes and a range of transition metal complexes of the unsubstituted ligand has been synthesized and evaluated for cytotoxicity against a human adenocarcinoma cell line. A QSAR anal. revealed ligand cytotoxicity is strongly correlated with electronic and transport factors and can be modeled by treating each "half" of the mol. as an isolated unit. Activity increases when substituents in the benzoyl ring were electron withdrawing whereas, for the salicylaldehyde ring, electron donation was required. The cytotoxicity of the Cu(II) complexes was greater than, and paralleled the ligands. Activity for the transition metal complexes of the unsubstituted ligand mirrored charge d. on the metal.
 ST salicylaldehyde benzoylhydrazone transition metal complex QSAR; colon anticancer salicylaldehyde benzoylhydrazone deriv structure; copper salicylaldehyde benzoylhydrazone complex cytotoxic QSAR; cisplatin resistance salicylaldehyde benzoylhydrazone analog structure; chelator adenocarcinoma inhibiting SAR metal complex
 IT Drug design
 Lipophilicity
 QSAR (structure-activity relationship)
 (QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)
 IT Coordination compounds
 Transition metal complexes
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)
 IT Drug resistance
 Structure-activity relationship
 (antitumor; QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)
 IT Antitumor agents
 (colon adenocarcinoma; QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

IT Intestine, neoplasm
Intestine, neoplasm
(colon, adenocarcinoma, inhibitors; QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

IT Antitumor agents
(resistance to; QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

IT 959-36-4P 18269-02-8P 260429-51-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

IT 3232-37-9 5941-05-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

IT 3232-37-9DP, chromium, cobalt, iron and nickel complexes 7439-89-6DP, Iron, salicylaldehyde benzoylhydrazone complex, biological studies 7440-47-3DP, Chromium, salicylaldehyde benzoylhydrazone complex, biological studies 18176-38-0P 56679-56-2P 82859-74-3P 127105-10-6P 260561-87-3P 260562-24-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

IT 3232-36-8 7440-02-0D, Nickel, salicylaldehyde benzoylhydrazone complex, biological studies 7440-48-4D, Cobalt, salicylaldehyde benzoylhydrazone complex, biological studies 16048-96-7 50366-20-6 50366-22-8 56192-42-8 56679-54-0 56679-55-1 62433-16-3 82859-70-9 82859-72-1 82859-73-2 82859-75-4 82859-76-5 96950-39-9 100622-79-5 100969-61-7 115695-40-4 119341-51-4 126681-61-6 260429-42-3 260429-43-4 260429-44-5 260429-45-6 260429-46-7 260429-47-8 260429-48-9 260429-49-0 260429-50-3 260561-35-1 260561-36-2 260561-37-3 260561-38-4 260561-39-5 260561-40-8 260561-41-9 260561-42-0 260561-43-1 260561-62-4 260561-86-2 260562-09-2 260562-10-5 260562-11-6 260562-12-7 260562-13-8 260562-14-9 260562-15-0 260562-16-1 260562-20-7 260562-21-8 260562-22-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

IT 15663-27-1, Cisplatin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

IT 772-33-8, 2-Hydroxy-5-nitrobenzyl bromide 936-02-7, Salicylhydrazide 7803-57-8, Hydrazine hydrate 15158-11-9, Copper(II), reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(QSAR anal of salicylaldehyde benzoylhydrazone analogs and their transition metal complexes)

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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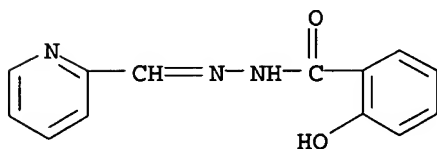
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IT 18176-38-0P

RL: BAC (Biological activity or effector, except adverse);
 BSU (Biological study, unclassified); PRP (Properties); SPN
 (Synthetic preparation); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (QSAR anal of salicylaldehyde benzoylhydrazone analogs and their
 transition metal complexes)

RN 18176-38-0 HCAPLUS

CN Benzoic acid, 2-hydroxy-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX
 NAME)



L52 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:42711 HCAPLUS

DN 132:144676

ED Entered STN: 18 Jan 2000

TI The biologically active iron chelators 2-pyridylcarboxaldehyde
 isonicotinoylhydrazone, 2-pyridylcarboxaldehyde benzoylhydrazone
 monohydrate and 2-furaldehyde isonicotinoylhydrazone

AU Richardson, Des R.; Becker, Erika; Bernhardt,

Paul V.

CS Department of Medicine, Royal Brisbane Hospital, University of Queensland,
Brisbane, 4029, Australia

SO Acta Crystallographica, Section C: Crystal Structure Communications (
1999), C55(12), 2102-2105
CODEN: ACSCEE; ISSN: 0108-2701

PB Munksgaard International Publishers Ltd.

DT Journal

LA English

CC 75-8 (Crystallography and Liquid Crystals)
Section cross-reference(s): 1, 9, 27

AB In the crystal structures of the resp. title compds., C₁₂H₁₀N₄O,
C₁₃H₁₁N₃O·H₂O and C₁₁H₉N₃O₂, variations in the torsion angles of
the aromatic pyridyl and benzoyl groups are observed, and the disposition of
the heterocyclic aldehyde is influenced by the ring size of this group.
Crystallog. data are given.

ST mol structure pyridylcarboxaldehyde benzoylhydrazone furaldehyde
isonicotinoylhydrazone

IT Crystal structure
Molecular structure
(of pyridylcarboxaldehyde isonicotinoylhydrazone, pyridylcarboxaldehyde
benzoylhydrazone monohydrate and furaldehyde isonicotinoylhydrazone)

IT 213013-18-4, 2-Furaldehyde isonicotinoylhydrazone 257299-41-5
257299-43-7
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)
(crystal structure of biol. active iron chelator of)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

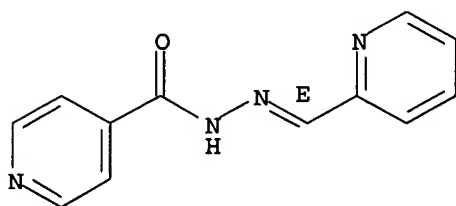
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1997
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IT 257299-41-5 257299-43-7
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)
(crystal structure of biol. active iron chelator of)

RN 257299-41-5 HCAPLUS

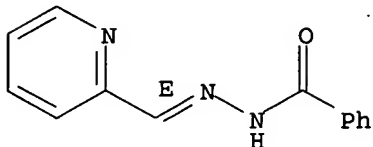
CN 4-Pyridinecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide,
stereoisomer (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 257299-43-7 HCAPLUS
CN Benzoic acid, (2E)-(2-pyridinylmethylene)hydrazide, monohydrate (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● H₂O

L52 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:783045 HCAPLUS
DN 132:246303
ED Entered STN: 10 Dec 1999
TI Development of novel aroylhydrazone ligands for iron chelation therapy:
2-pyridylcarboxaldehyde isonicotinoyl hydrazone analogs
AU **Becker, Erika; Richardson, Des R.**
CS Department of Medicine, Royal Brisbane Hospital, University of Queensland,
Brisbane, Australia
SO Journal of Laboratory and Clinical Medicine (1999), 134(5),
510-521
CODEN: JLCMAK; ISSN: 0022-2143
PB Mosby, Inc.
DT Journal
LA English
CC 1-12 (Pharmacology)
AB Previous studies have demonstrated that aroylhydrazone iron (Fe) chelators of the pyridoxal isonicotinoyl hydrazone (PIH) class have high Fe chelation efficacy both in vitro and in vivo. Depending on their design, these drugs may have potential as agents for the treatment of Fe overload disease or cancer. Considering the high potential of this class of ligands, we have synthesized seven novel aroylhydrazones in an attempt to identify Fe chelators more efficient than desferrioxamine (DFO) and more soluble than those of the PIH class. These compds. belong to a new series of tridentate chelators known as the 2-pyridylcarboxaldehyde isonicotinoyl hydrazones (PCIH). In this study we have examined the Fe chelation efficacy and antiproliferative activity of these chelators including their effects on the expression of genes (WAF1 and GADD45) known to be important in mediating cell cycle arrest at G1/S. From seven chelators synthesized, three ligands, namely 2-pyridylcarboxaldehyde benzoyl hydrazone (PCBH), 2-pyridylcarboxaldehyde m-bromobenzoyl hydrazone (PCBBH), and 2-pyridylcarboxaldehyde 2-thiophenecarboxyl hydrazone (PCTH), showed greater Fe chelation activity than DFO and comparable or greater efficiency than PIH. These ligands were highly effective at both mobilizing ⁵⁹Fe from cells and preventing ⁵⁹Fe uptake from ⁵⁹Fe-transferrin and caused a marked increase in the RNA-binding activity of the iron-regulatory proteins (IRP). Our studies have also demonstrated that compared with the cytotoxic Fe chelator, 2-hydroxy-1-naphthylaldehyde isonicotinoyl hydrazone (311), these ligands have far less effect on cellular growth and 3H-thymidine, 3H-leucine, or 3H-uridine incorporation. In addition, in contrast to 311, which markedly increased WAF1 and GADD45 mRNA expression, PCBH and PCTH did not have any effect, whereas PCBBH increased the expression of GADD45 mRNA. Collectively, these results demonstrate the potential of several of these ligands as agents for the

management of Fe overload disease.

- ST iron chelator pyridoxal isonicotinoyl hydrazone
- IT Antitumor agents
Chelating agents
(iron chelation by 2-pyridylcarboxaldehyde isonicotinoyl hydrazone analogs)
- IT Transferrins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(iron chelation by 2-pyridylcarboxaldehyde isonicotinoyl hydrazone analogs)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(iron-regulatory; iron chelation by 2-pyridylcarboxaldehyde isonicotinoyl hydrazone analogs)
- IT 70-51-9, Desferrioxamine 737-86-0, Pyridoxal isonicotinoyl hydrazone
796-42-9 1215-55-0 6956-53-2 15017-32-0
114011-30-2 158833-85-3 158833-86-4
262421-84-1
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(iron chelation by 2-pyridylcarboxaldehyde isonicotinoyl hydrazone analogs)
- IT 7439-89-6, Iron, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(iron chelation by 2-pyridylcarboxaldehyde isonicotinoyl hydrazone analogs)

RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
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IT 1215-55-0 15017-32-0 114011-30-2

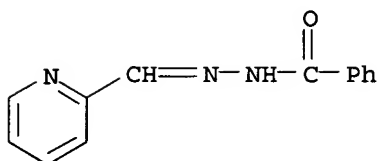
158833-85-3 158833-86-4 262421-84-1

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(iron chelation by 2-pyridylcarboxaldehyde isonicotinoyl hydrazone analogs)

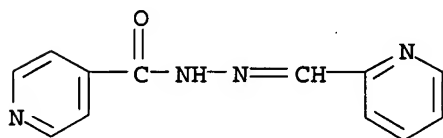
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CN Benzoic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



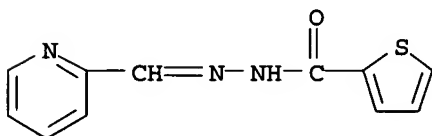
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CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

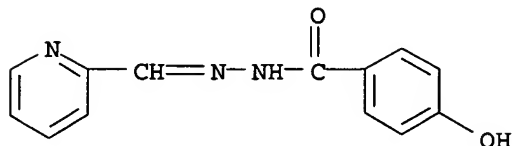


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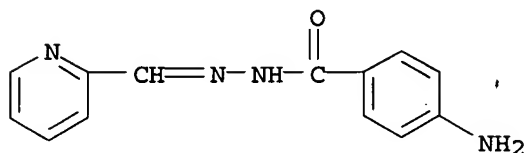
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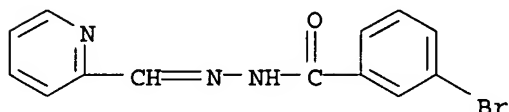
RN 158833-85-3 HCAPLUS
 CN Benzoic acid, 4-hydroxy-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



RN 158833-86-4 HCAPLUS
 CN Benzoic acid, 4-amino-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



RN 262421-84-1 HCAPLUS
 CN Benzoic acid, 3-bromo-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:253739 HCAPLUS
 DN 130:325088
 ED Entered STN: 26 Apr 1999
 TI Preparation of acylhydrazone derivatives as Maillard reaction inhibitors and active oxygen scavengers
 IN Inoue, Hitoshi; Horigome, Masato; Kinoshita, Nobuhiro; Shibayama, Toshie
 PA Nisshin Flour Milling Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 80 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C07C235-46
 ICS A61K031-15; A61K031-165; A61K031-215; A61K031-275; A61K031-31; A61K031-35; A61K031-40; A61K031-44; A61K031-445; A61K031-47; A61K031-495; A61K031-535; C07C235-16; C07C243-38; C07C243-40; C07C251-68; C07C251-76; C07C251-80; C07C251-84
 CC 27-14 (Heterocyclic Compounds (One Hetero Atom))
 Section cross-reference(s): 1, 25, 28

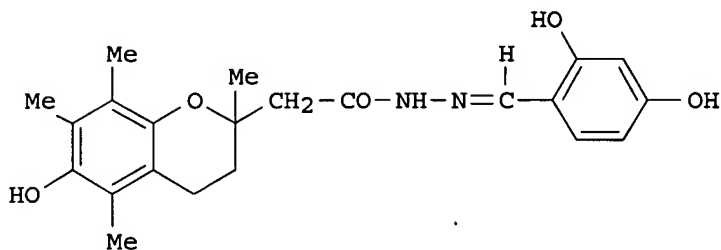
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11106371	A2	19990420	JP 1998-177222	19980624 <--
PRAI JP 1997-179754	A	19970704	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 11106371	ICM	C07C235-46
	ICS	A61K031-15; A61K031-165; A61K031-215; A61K031-275; A61K031-31; A61K031-35; A61K031-40; A61K031-44; A61K031-445; A61K031-47; A61K031-495; A61K031-535; C07C235-16; C07C243-38; C07C243-40; C07C251-68; C07C251-76; C07C251-80; C07C251-84

OS MARPAT 130:325088
GI



AB The title compds. XWY [X = benzene ring, chroman ring, etc.; Y = (un)substituted Ph, etc.; W = CONHN:CH, etc.] are prepared The title compound I in vitro showed IC50 of 4.2 μ M against the Maillard reaction.

ST acylhydrazone Maillard reaction inhibitor oxygen scavenger; Maillard reaction inhibitor acylhydrazone prepn; active oxygen scavenger acylhydrazone prepn

IT Peroxidation
(lipid; preparation of acylhydrazone derivs. as Maillard reaction inhibitors and active oxygen scavengers)

IT Lipids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxidn.; preparation of acylhydrazone derivs. as Maillard reaction inhibitors and active oxygen scavengers)

IT Antioxidants
Maillard reaction
(preparation of acylhydrazone derivs. as Maillard reaction inhibitors and active oxygen scavengers)

IT Diabetes mellitus
(preparation of acylhydrazone derivs. as Maillard reaction inhibitors and active oxygen scavengers with effect on diabetic complications)

IT 223720-30-7P 223720-36-3P 223720-40-9P 223720-42-1P 223720-50-1P
223720-55-6P 223720-60-3P 223720-67-0P 223720-70-5P 223720-73-8P
223720-76-1P 223720-79-4P 223720-82-9P 223720-85-2P 223720-88-5P
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223721-11-7P 223721-13-9P 223721-14-0P 223721-16-2P 223721-18-4P
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 223723-36-2P 223723-37-3P 223723-38-4P 223723-39-5P 223723-40-8P
 223723-41-9P 223723-42-0P 223723-43-1P 223723-44-2P 223723-45-3P

RL: BAC (Biological activity or effector, except adverse);

BSU (Biological study, unclassified); SPN (Synthetic preparation);

THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(preparation of acylhydrazone derivs. as Maillard reaction inhibitors and active oxygen scavengers)

IT 60-34-4, Methylhydrazine 64-04-0, Phenethylamine 65-85-0, Benzoic acid, reactions 66-72-8, Pyridoxal 69-72-7, Salicylic acid, reactions 75-75-2, Methanesulfonic acid 90-02-8, reactions 90-59-5, 3,5-Dibromosalicylaldehyde 95-01-2, 2,4-Dihydroxybenzaldehyde 97-51-8, 5-Nitrosalicylaldehyde 100-52-7, Benzaldehyde, reactions 123-38-6, Propanal, reactions 148-53-8, o-Vanillin 302-01-2, Hydrazine, reactions 459-57-4, 4-Fluorobenzaldehyde 541-41-3, Ethyl chloroformate 622-33-3, O-Benzylhydroxylamine 932-90-1, α -Benzaldoxime 1421-49-4, 3,5-Di-tert-butyl-4-hydroxybenzoic acid 2039-66-9, 2-Hydroxyphenethylamine 2511-22-0, Methyl 3,5-di-tert-butyl-4-hydroxybenzoate 2905-83-1 3202-96-8 3291-00-7, Salicylaldehyde hydrazone 5470-11-1, Hydroxylamine hydrochloride 6386-38-5 17754-90-4, 4-(Diethylamino)salicylaldehyde 22014-01-3, 3,5-Di-tert-butyl-4-hydroxycinnamic acid 40056-43-7 51084-72-1, o-Vanillin hydrazone 52085-11-7 53101-55-6 53101-57-8 86646-83-5 100863-88-5 223723-56-6 223723-57-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of acylhydrazone derivs. as Maillard reaction inhibitors and active oxygen scavengers)

IT 1595-15-9P 2325-01-1P 2874-33-1P 4548-88-3P 5399-68-8P
 13466-29-0P 32687-77-7P 42900-04-9P 90223-30-6P 198280-97-6P
 223723-46-4P 223723-47-5P 223723-48-6P 223723-49-7P 223723-50-0P
 223723-51-1P 223723-53-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of acylhydrazone derivs. as Maillard reaction inhibitors and active oxygen scavengers)

IT 223722-10-9P

RL: BAC (Biological activity or effector, except adverse);

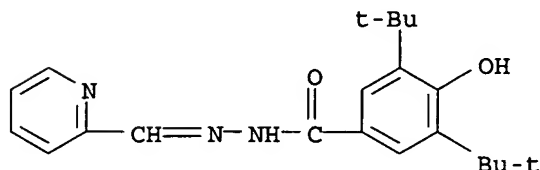
BSU (Biological study, unclassified); SPN (Synthetic preparation);

THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(preparation of acylhydrazone derivs. as Maillard reaction inhibitors and
active oxygen scavengers)

RN 223722-10-9 HCAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, (2-
pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:719299 HCAPLUS

DN 130:1842

ED Entered STN: 12 Nov 1998

TI Method for the preparation of facial metal tricarbonyl compounds and their
use in the labeling of biologically active substrates

IN Alberto, Roger; Schibli, Roger; Egli, Andre

PA Mallinckrodt Medical, Inc., USA

SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K051-04

ICS C01G045-04; C07F013-00

CC 8-9 (Radiation Biochemistry)

Section cross-reference(s): 78

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9848848	A1	19981105	WO 1998-US7979	19980421 <--
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	EP 879606	A1	19981125	EP 1997-201232	19970425 <--
	R: CH, LI, NL				
	CA 2282563	AA	19981105	CA 1998-2282563	19980421 <--
	AU 9871413	A1	19981124	AU 1998-71413	19980421 <--
	AU 748213	B2	20020530		
	BR 9809409	A	20000613	BR 1998-9409	19980421 <--
	EP 1019095	A1	20000719	EP 1998-918501	19980421 <--
	EP 1019095	B1	20020116		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
	NZ 337303	A	20001222	NZ 1998-337303	19980421 <--
	AT 211924	E	20020215	AT 1998-918501	19980421 <--
	ES 2168751	T3	20020616	ES 1998-918501	19980421 <--
	PT 1019095	T	20020731	PT 1998-918501	19980421 <--
	NO 9905160	A	19991213	NO 1999-5160	19991022 <--
	US 6344178	B1	20020205	US 1999-403704	19991022 <--
PRAI	EP 1997-201232	A	19970425	<--	
	WO 1998-US7979	W	19980421	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9848848	ICM	A61K051-04
	ICS	C01G045-04; C07F013-00
WO 9848848	ECLA	A61K051/04; C01G045/04; C01G057/00; C07B059/00F; C07F013/00B
EP 879606	ECLA	A61K051/04; C01G045/04; C01G057/00; C07B059/00F; C07F013/00B
US 6344178	ECLA	A61K051/08Z; C07F013/00B
AB	A method is disclosed for preparing fac-[M(CO)3(OH2)3]+ (M = Mn, 99mTc, 186Re, 188Re) (I) by reacting a metal in the permethylate form with carbon monoxide and a reducing agent, characterized in that a mixture of a base, a reducing agent soluble in water but not substantially decomposed by water, and optionally a stabilizing agent, is solved in a water-containing solvent system containing a solution of the metal in the permanganate, pertechnetate or perrhenate form in the presence of carbon monoxide and optionally in the presence of a halide. Also disclosed are to a method of preparing a labeled compound with the aid of the compound I, a method of direct preparation of labeled compds., a method of labeling of substrates (e.g. amino acids, peptides, proteins, sugars, small receptor binding mols. and body cells) with the aid of compound I, a kit for the preparation of a labeling composition, and a kit for the preparation of a diagnostic or therapeutic pharmaceutical composition	
ST	facial metal tricarbonyl prepn diagnostic therapeutic	
IT	Diagnosis	
of	(agents; facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)	
IT	Chelating agents	
	Drug delivery systems	
	Radiopharmaceuticals	
	Reducing agents	
	(facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)	
IT	Receptors	
	RL: BSU (Biological study, unclassified); BIOL (Biological study)	
	(ligands; facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)	
IT	Antibodies	
	RL: RCT (Reactant); RACT (Reactant or reagent)	
	(monoclonal, reaction; facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)	
IT	Amino acids, reactions	
	Bases, reactions	
	Carbohydrates, reactions	
	Halides	
	Ligands	
	Peptides, reactions	
	Proteins, general, reactions	
	RL: RCT (Reactant); RACT (Reactant or reagent)	
	(reaction; facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)	
IT	Antibodies	
	RL: RCT (Reactant); RACT (Reactant or reagent)	
	(scFv; facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)	
IT	163932-31-8P	215669-69-5P 215669-75-3P 215669-78-6P
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)	

(facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)

IT 66-71-7DP, 1,10-Phenanthroline, technetium-99 complexes 4930-98-7DP, technetium-99 complexes 14133-76-7DP, Tc-99, peptide complexes, biological studies 16598-05-3DP, technetium-99 complexes 25976-65-2DP, technetium-99 complexes 215658-47-2DP, technetium-99 complexes 215658-52-9DP, technetium-99 complexes 215669-79-7P 215669-82-2P 215669-84-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)

IT 58-85-5, Biotin

RL: RCT (Reactant); RACT (Reactant or reagent)

(facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)

IT 66-71-7, 1,10-Phenanthroline 71-00-1, Histidine, reactions 144-55-8, Sodium bicarbonate, reactions 298-14-6, Potassium bicarbonate 497-19-8, Carbonic acid disodium salt, reactions 584-08-7 630-08-0, Carbon monoxide, reactions 1215-55-0 1305-62-0, Calcium hydroxide, reactions 1309-42-8, Magnesium hydroxide 1310-58-3, Potassium hydroxide, reactions 1310-73-2, Sodium hydroxide, reactions 4930-98-7 13762-51-1, Potassium borohydride 14333-13-2, Permanganate 16598-05-3 16940-66-2, Sodium borohydride 16949-15-8, Lithium borohydride 16971-29-2, Borohydride 16971-29-2D, Borohydride, derivs. 17611-70-0, Zinc borohydride 23288-61-1, 99Tc-Pertechnetate 25976-65-2 87552-16-7, 186Re-perrhenate 122123-28-8, 188Re-perrhenate 215658-47-2 215658-52-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction; facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)

IT 141-53-7, Sodium formate 304-59-6, Sodium potassium tartrate, miscellaneous 994-36-5, Sodium citrate

RL: MSC (Miscellaneous)

(stabilizing agent; facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Bamford, C; J CHEM SOC DALTON TRANS 1978, 1, P4 HCAPLUS

(2) Beck, W; J ORGANOMET CHEM 1980, V191(1), P73 HCAPLUS

(3) Centre Nat Rech Scient; EP 0105785 A 1984 HCAPLUS

(4) Egli, A; Hydrolysis of the Organometallic Aqua Ion fac-Triaquatricarbonylrhenium(I) Mechanism, pKa, and Formation Constants of the Polynuclear Hydrolysis Products 1997, 18, HCAPLUS

(5) Egli, A; ORGANOMETALLICS 1997, V16(9), P1833 HCAPLUS

(6) Meder, H; Z NATURFORSCH, B: ANORG CHEM, ORG CHEM 1986, V41B(10), P1247 HCAPLUS

(7) Schbiger, P; JOURNAL OF NUCLEAR MEDICINE ABSTRACT BOOK 1997, P180P

(8) Verona, I; J ORGANOMET CHEM 1996, V524(1-2), P71 HCAPLUS

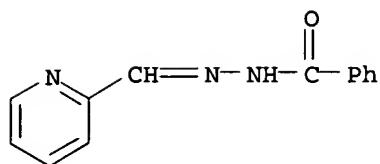
IT 1215-55-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction; facial metal tricarbonyl compound preparation and use in labeling of biol. active substrates for diagnosis and therapy)

RN 1215-55-0 HCAPLUS

CN Benzoic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:541058 HCAPLUS
 DN 129:285149
 ED Entered STN: 26 Aug 1998
 TI Nitrogen, sulfur and oxygen donor adducts with copper(II) complexes of antitumor 2-formylpyridinethiosemicarbazone analogs: physicochemical and cytotoxic studies
 AU Ainscough, Eric W.; Brodie, Andrew M.; Denny, William A.; Finlay, Graeme J.; Ranford, John D.
 CS Chemistry - Institute of Fundamental Sciences, Massey University, N. Z.
 SO Journal of Inorganic Biochemistry (1998), 70(3;4), 175-185
 CODEN: JIBIDJ; ISSN: 0162-0134
 PB Elsevier Science Inc.
 DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)
 Section cross-reference(s): 1
 AB The preparation of N-, S- and O-donor ligand adducts with $\text{CuX}^+(\text{HX} = 6\text{-methyl-2-formylpyridinethiosemicarbazone (6HL)}; 2\text{-formylpyridine-2'-methylthiosemicarbazone (2'L)}; 2\text{-formylpyridine-4'-methylthiosemicarbazone (4'HL)})$ is described. The N-donors, 2,2'-bipyridyl (bipy), 4-dimethylaminopyridine (dmap) give $[\text{Cu}(6\text{L})(\text{bipy})]\text{PF}_6$, $[\text{Cu}(6\text{L})(\text{bipy})]\text{Cl}\cdot 5\text{H}_2\text{O}$, $[\text{Cu}(4'\text{L})(\text{bipy})]\text{PF}_6$, $[\text{Cu}(6\text{L})(\text{dmap})_2]\text{PF}_6\cdot 2.5\text{H}_2\text{O}$ and $[\text{Cu}(4'\text{L})(\text{dmap})_2]\text{PF}_6\cdot \text{H}_2\text{O}$ which were characterized by phys. and spectroscopic techniques. Pentafluorothiophenolate (pftp) gives S-donor complexes $[\text{CuX}(\text{pftp})]$ ($\text{X} = 6\text{L}$ and $4'\text{L}$) and thiolato coordination is proposed from spectroscopic evidence. Paratritylphenolate (ptp) and HPO_4^{2-} give O-donor complexes $[\text{Cu}(6\text{L})(\text{ptp})]$, $[\text{Cu}(4'\text{L})(\text{ptp})]$, $[\{\text{Cu}(6\text{L})\}_2\text{HPO}_4]\cdot 4\text{H}_2\text{O}$, and $[\{\text{Cu}(4'\text{L})\}_2\text{HPO}_4]\cdot 5\text{H}_2\text{O}$ which were characterized by phys. and spectroscopic techniques, as have the precursor complexes $[\text{Cu}(6\text{L})(\text{CH}_3\text{COO})]\cdot \text{H}_2\text{O}$, $[\text{Cu}(4'\text{L})(\text{CH}_3\text{COO})]$, $[\text{Cu}(6\text{HL})(\text{CF}_3\text{COO})](\text{CF}_3\text{COO})\cdot 0.5\text{H}_2\text{O}$, $[\text{Cu}(4'\text{HL})(\text{CF}_3\text{COO})](\text{CF}_3\text{COO})$, $[\text{Cu}(2'\text{L})\text{Cl}_2]$ and $[\text{Cu}(2'\text{L})(\text{NO}_3)_2]$. Protonation consts. for the ligands and some of their complexes were determined. 2-Formylpyridinethiosemicarbazone (HL) complexes of Ag, Au, Zn, Hg, Cd and Pb are discussed and cytotoxicity against the human tumor cell line HCT-8 and antiviral data for selected compds. are presented.
 ST transition metal formylpyridinethiosemicarbazone prepn; antitumor activity
 transition metal formylpyridinethiosemicarbazone complex; antiviral
 activity copper formylpyridinethiosemicarbazone acetato complex;
 protonation const copper formylpyridinethiosemicarbazone acetato complex;
 redn potential copper formylpyridinethiosemicarbazone acetato complex
 IT Antitumor agents
 Antiviral agents
 Reduction potential
 IT Protonation
 (constant)
 IT Molecular structure
 (of copper 2-formylpyridinethiosemicarbazone complex)
 IT Transition metal complexes
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (thiosemicarbazone; preparation of 2-formylpyridinethiosemicarbazone

- antitumor analogs)
- IT Semicarbazones
RL: SPN (Synthetic preparation); PREP (Preparation)
(transition metal thiosemicarbazone complexes; preparation of
2-formylpyridinethiosemicarbazone antitumor analogs)
- IT 1215-55-0, 2-Formylpyridine benzoylhydrazide 213775-36-1
RL: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); BIOL (Biological
study)
(antitumor activity)
- IT 106879-52-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); PRP (Properties); BIOL (Biological study)
(antitumor and antiviral activity, cyclic voltammetry and protonation
constant)
- IT 3608-75-1, 2-Formylpyridinethiosemicarbazone 6839-88-9 6853-69-6,
6-Methyl-2-formylpyridinethiosemicarbazone 51984-11-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); PRP (Properties); RCT (Reactant); BIOL (Biological
study); RACT (Reactant or reagent)
(complexation with transition metal ions, protonation constant, cyclic
voltammetry, and antitumor activity)
- IT 771-62-0, Pentafluorothiophenol 978-86-9, 4-Tritylphenol 1122-58-3,
4-Dimethylaminopyridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(for preparation of copper 2-formylpyridinethiosemicarbazone complexes)
- IT 213775-07-6P 213775-10-1P 213775-22-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological
study); PREP (Preparation)
(preparation and antitumor activity)
- IT 213774-68-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and mol. structure)
- IT 112340-96-2P 112340-97-3P 213774-56-2P 213774-59-5P 213774-61-9P
213774-64-2P 213774-73-3P 213774-77-7P 213774-82-4P 213774-86-8P
213774-89-1P 213774-92-6P 213774-95-9P 213774-97-1P 213775-01-0P
213775-04-3P 213775-12-3P 213775-15-6P 213775-18-9P 213775-24-7P
213775-28-1P 213775-31-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
- IT 179938-09-1P 213774-52-8P 213774-99-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation)
(preparation, antitumor and antiviral activity, cyclic voltammetry and
protonation constant)
- IT 15189-51-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with 2-formylpyridinethiosemicarbazone)

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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IT 1215-55-0, 2-Formylpyridine benzoylhydrazone

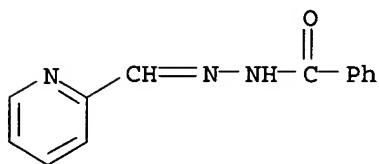
RL: BAC (Biological activity or effector, except adverse);

BSU (Biological study, unclassified); BIOL (Biological study)

(antitumor activity)

RN 1215-55-0 HCAPLUS

CN Benzoic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:61310 HCAPLUS

DN 126:168980

ED Entered STN: 29 Jan 1997

TI Antitubercular activity of isonicotinoylhydrazones α -pyridinaldehyde and coordination compounds of manganese(II), cobalt(II), nickel(II), copper(II), zinc, and cadmium based on it

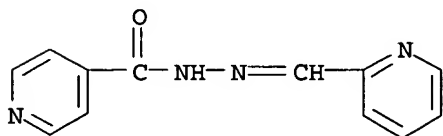
AU Tsintsadze, M. G.; Narimanidze, A. P.; Shilakadze, E. M.; Napetvaridze, L. D.; Tsintsadze, T. G.; Chanturiya, M. M.; Kipiani, T. I.

CS Gruz. Tekh. Univ., Georgia

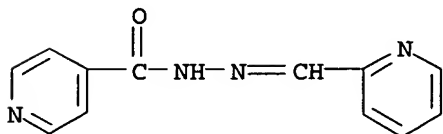
SO Soobshcheniya Akademii Nauk Gruzii (1995), 151(2), 287-289

CODEN: SANGF

PB Nauka
 DT Journal
 LA Russian
 CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
 Section cross-reference(s): 1
 AB Antitubercular activity of isonicotinoylhydrazone α -pyridine aldehyde and coordination compds. of manganese (II), cobalt (II), nickel (II), copper (II), zinc, and cadmium prepared on its base have been studied in vitro. It is shown that compared with the well-known antitubercular preparation - isonicotine hydrazide (tubazide), the manganic (II) chloride and nickelous (II) sulfate complexed are the most active.
 ST tuberculostatic isonicotinoylhydrazone pyridinaldehyde metal coordination compd
 IT 54-85-3, Tubazide 7439-96-5D, Manganese, complex with isonicotinoylhydrazone α -pyridinaldehyde and chloride, biological studies 7440-43-9D, Cadmium, complex with isonicotinoylhydrazone α -pyridinaldehyde and sulfate, biological studies 7440-48-4D, Cobalt, complex with isonicotinoylhydrazone α -pyridinaldehyde and chloride, biological studies 7440-66-6D, Zinc, complex with isonicotinoylhydrazone α -pyridinaldehyde and sulfate, biological studies 15017-32-0 15017-32-0D, complexes with manganese, cobalt, zinc and cadmium 187085-54-7 187085-56-9 187085-58-1 187085-61-6 187085-63-8
 RL: BAC (Biological activity or effector, except adverse);
 BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antitubercular activity of isonicotinoylhydrazone α -pyridinaldehyde and coordination compds. of manganese(II), cobalt(II), nickel(II), copper(II), zinc, and cadmium based on it)
 IT 15017-32-0 15017-32-0D, complexes with manganese, cobalt, zinc and cadmium
 RL: BAC (Biological activity or effector, except adverse);
 BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antitubercular activity of isonicotinoylhydrazone α -pyridinaldehyde and coordination compds. of manganese(II), cobalt(II), nickel(II), copper(II), zinc, and cadmium based on it)
 RN 15017-32-0 HCAPLUS
 CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



RN 15017-32-0 HCAPLUS
 CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:873157 HCAPLUS
DN 123:334700
ED Entered STN: 24 Oct 1995
TI Evaluation of some arylhydrazones of p-aminobenzoic acid hydrazide as
antimicrobial agents and the in vitro hepatic microsomal metabolism
AU Komurcu, S. G.; Rollas, S.; Ulgen, M.; Gorrod, J. W.; Cevikbas, A.
CS Faculty of Pharmacy, University of Marmara, Hydrapasa, 81919, Turk.
SO Bollettino Chimico Farmaceutico (1995), 134(7), 375-9
CODEN: BCFAAI; ISSN: 0006-6648
PB Societa Editoriale Farmaceutica
DT Journal
LA English
CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 1, 25
AB Benzoic acid p-amino-[(substituted phenyl/pyridyl)methylene] hydrazide
derivs. were synthesized by interaction of p-aminobenzoic acid hydrazide
with various aromatic aldehydes. The structures of the compds. were
elucidated by use of their UV, IR, 1H-NMR and mass spectral data. These
compds. were also evaluated for antimicrobial activity. The in vitro
hepatic microsomal metabolism of benzoic acid p-amino-[(4-
fluorophenyl)methylene]hydrazide, a selected prototype from these compds.
was also carried out.
ST arylhydrazone aminobenzoate hydrazide prepn antimicrobial metab
IT Acidity
Bactericides, Disinfectants, and Antiseptics
Fungicides and Fungistats
Liver
Microsome
(evaluation of arylhydrazones of p-aminobenzoic acid hydrazide as
antimicrobial agents and in vitro hepatic microsomal metabolism)
IT 170711-65-6P
RL: BAC (Biological activity or effector, except adverse); BPR (Biological
process); BSU (Biological study, unclassified); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); PROC (Process); USES (Uses)
(evaluation of arylhydrazones of p-aminobenzoic acid hydrazide as
antimicrobial agents and in vitro hepatic microsomal metabolism)
IT 97742-04-6P 97742-08-0P 97742-10-4P 158833-86-4P
170711-64-5P 170711-66-7P 170711-67-8P
RL: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(evaluation of arylhydrazones of p-aminobenzoic acid hydrazide as
antimicrobial agents and in vitro hepatic microsomal metabolism)
IT 459-57-4, p-Fluorobenzaldehyde
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL
(Biological study); FORM (Formation, nonpreparative)
(evaluation of arylhydrazones of p-aminobenzoic acid hydrazide as
antimicrobial agents and in vitro hepatic microsomal metabolism)
IT 5351-17-7, p-Aminobenzoic acid hydrazide
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); RCT
(Reactant); BIOL (Biological study); FORM (Formation, nonpreparative);
RACT (Reactant or reagent)
(evaluation of arylhydrazones of p-aminobenzoic acid hydrazide as
antimicrobial agents and in vitro hepatic microsomal metabolism)
IT 94-09-7, Ethyl p-aminobenzoate 7803-57-8, Hydrazine-hydrate
RL: RCT (Reactant); RACT (Reactant or reagent)
(evaluation of arylhydrazones of p-aminobenzoic acid hydrazide as
antimicrobial agents and in vitro hepatic microsomal metabolism)
IT 132256-07-6P 170711-63-4P
RL: SPN (Synthetic preparation); PREP (Preparation)

(evaluation of arylhydrazones of p-aminobenzoic acid hydrazide as antimicrobial agents and in vitro hepatic microsomal metabolism)

IT 158833-86-4P

RL: BAC (Biological activity or effector, except adverse);

BSU (Biological study, unclassified); SPN (Synthetic preparation);

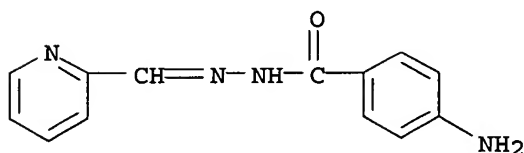
THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(evaluation of arylhydrazones of p-aminobenzoic acid hydrazide as antimicrobial agents and in vitro hepatic microsomal metabolism)

RN 158833-86-4 HCAPLUS

CN Benzoic acid, 4-amino-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:106782 HCAPLUS

DN 120:106782

ED Entered STN: 05 Mar 1994

TI Preparation of pyridyl acylhydrazones as microbicides

IN Heuer, Lutz; Schwamborn, Michael; Erdelen, Christoph; Dehne, Heinz Wilhelm; Berg, Dieter; Endermann, Rainer; Metzger, Karl Georg; Bremm, Klaus Dieter; Ludwig, Georg Wilhelm

PA Bayer A.-G., Germany

SO Ger. Offen., 27 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM C07D213-53

ICS C07D417-12; C07D413-10; C07D401-12; C07D405-12; C07D521-00; C07D227-04; C07D213-60; A01N047-34; A01N047-24; A01N047-36; A01N047-38

ICI C07D213-53, C07D277-32, C07D213-75, C07D265-30, C07D239-42, C07D251-22, C07D307-14, C07D227-04

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 5

FAN.CNT 1

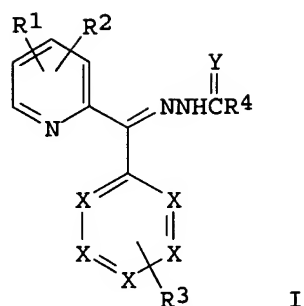
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4207400	A1	19930916	DE 1992-4207400	19920309 <--
PRAI DE 1992-4207400		19920309	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 4207400	ICM	C07D213-53
	ICS	C07D417-12; C07D413-10; C07D401-12; C07D405-12; C07D521-00; C07D227-04; C07D213-60; A01N047-34; A01N047-24; A01N047-36; A01N047-38
	ICI	C07D213-53, C07D277-32, C07D213-75, C07D265-30, C07D239-42, C07D251-22, C07D307-14, C07D227-04

OS MARPAT 120:106782

GI



AB Title compds. [I; R1-R3 = H, halo, alkyl, haloalkyl, alkoxy, alkoxyalkyl, alkylthio, cycloalkyl, (substituted) Ph; R1R2 = atoms to complete an unsatd. 6-membered ring; R4 = N[(CH2)nR5][(CH2)nR6], S(CH2)nR5, O(CH2)nR5; R5, R6 = H, (substituted) (O, S-, CO-, SO-, SO2-, or imino-interrupted) alkyl, alkenyl, haloalkyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, etc.; R5R6 = atoms to form a (substituted) (O-, S-, CO-, SO-, SO2-, or imino-substituted) 3-18 membered ring; X = C, N; Y = S, NH; n = 0-10], and salts and complexes thereof, were prepared. Thus, 2-benzoylpyridine and 4-phenyl-3-thiosemicarbazide were heated in EtOH to give I (R1-R3 = H, R4 = NHPh, X = C, Y = S). Numerous I were active against *Alternaria tenuis*, *Aspergillus niger*, *Aureobasidium pullulans*, etc., at <200 mg/L. Several I were said to show superior activity against *Phaedon cochleariae*, *Plutella maculipennis*, and *Heliothis virescens* on crop plants.

ST pyridinyl acylhydrazone prepn microbicide; fungicide pyridinyl acylhydrazone; pesticide pyridinyl acylhydrazone; bactericide pyridinyl acylhydrazone

IT Bactericides, Disinfectants, and Antiseptics
Fungicides and Fungistats
Insecticides
Pesticides

(pyridyl acylhydrazones)
IT Fungicides and Fungistats
(agrochem., pyridyl acylhydrazones)

IT **1215-55-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for microbicide)

IT	26158-28-1P	65518-40-3P	82130-13-0P	82766-13-0P	85748-43-2P
	150314-56-0P	152094-66-1P	152094-67-2P	152094-68-3P	152094-69-4P
	152094-70-7P	152094-71-8P	152094-72-9P	152094-73-0P	152094-74-1P
	152094-75-2P	152094-76-3P	152094-77-4P	152094-78-5P	152094-79-6P
	152094-80-9P	152094-81-0P	152094-82-1P	152094-83-2P	152094-84-3P
	152094-85-4P	152094-86-5P	152094-87-6P	152094-88-7P	152094-89-8P
	152094-90-1P	152094-91-2P	152094-92-3P	152094-93-4P	152094-94-5P
	152094-95-6P	152094-96-7P	152094-97-8P	152094-98-9P	152094-99-0P
	152095-00-6P	152095-01-7P	152095-02-8P	152095-03-9P	152095-04-0P
	152095-05-1P	152095-06-2P	152095-07-3P	152095-08-4P	152095-09-5P
	152095-10-8P	152095-11-9P	152095-12-0P	152095-13-1P	152095-14-2P
	152095-15-3P	152095-16-4P	152095-17-5P	152095-18-6P	152095-19-7P
	152095-20-0P	152095-21-1P	152095-22-2P	152095-23-3P	152095-24-4P
	152095-25-5P	152095-26-6P	152095-27-7P	152095-28-8P	152095-29-9P
	152095-30-2P	152095-31-3P	152095-32-4P	152095-33-5P	152095-34-6P
	152095-35-7P	152095-36-8P	152095-37-9P	152095-38-0P	152095-39-1P
	152095-40-4P	152095-41-5P	152095-42-6P	152095-43-7P	152095-44-8P
	152095-45-9P	152095-46-0P	152095-47-1P	152095-48-2P	152095-49-3P
	152095-50-6P	152095-51-7P	152095-52-8P	152095-53-9P	152095-54-0P
	152095-55-1P	152095-56-2P	152095-57-3P	152095-58-4P	152095-59-5P
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 152096-00-9P 152096-01-0P 152096-02-1P 152096-03-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as microbicide)

IT 91-02-1, 2-Benzoylpyridine 302-01-2, Hydrazine, reactions 1569-69-3,
 Cyclohexylmercaptan 5351-69-9, 4-Phenyl-3-thiosemicarbazide 7307-55-3,
 n-Undecylamine

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of acylhydrazone microbicide)

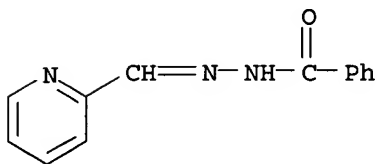
IT 1215-55-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as intermediate for microbicide)

RN 1215-55-0 HCAPLUS

CN Benzoic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:407226 HCAPLUS

DN 117:7226

ED Entered STN: 11 Jul 1992

TI Biologically active thiazolidinone. Part III. Synthesis and fungal
 toxicities of substituted thiazolidinone, thioether and N-benzoyl
 heterocyclic compounds from benzoic acid hydrazones

AU Abdel-Rahman, R. M.; El-Gendy, Z.; Fawzy, M. M.; Mahmoud, M. B.

CS Fac. Educ., Ain Shams Univ., Cairo, Egypt

SO Journal of the Indian Chemical Society (1991), 68(11), 628-31

CODEN: JICSAH; ISSN: 0019-4522

DT Journal

LA English

CC 21-2 (General Organic Chemistry)

Section cross-reference(s): 1

AB The title compds were prepared by reactions of benzoylhydrazones with
 HSCH2CO2H, 4-ClC6H4SH, PhCOCH2COMe, and 2-PhCOC6H4CO2H. Reactions of
 dibenzoylhydrazones with N2H4·H2O and guanidine hydrochloride were
 also described. Products such as I and II showed antifungal activity.

ST fungicide thiazolidinone thioether benzoyl heterocycle; benzoyl
 heterocycle prepn fungicide; thiazolidinone prepn fungicide; thioether
 prepn fungicide

IT Cyclocondensation reaction

(of benzoylhydrazones with thiols, carbonyl compds. and nitrogen
 compds.)

IT Addition reaction

(of benzylhydrazones with thiols)

IT Fungicides and Fungistats

(thiazolidinones, thioethers and hydrazones)

IT 106-54-7, p-Chlorobenzenethiol

RL: RCT (Reactant); RACT (Reactant or reagent)

(addition reaction of, with benzoylhydrazones)

IT 85-52-9, 2-Benzoylbenzoic acid 93-91-4, Benzoylacetone

RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization reaction of, with benzoylhydrazones)

IT 50-01-1, Guanidine monohydrochloride 302-01-2, Hydrazine, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization reaction of, with dibenzoylhydrazones)

IT 141736-86-9P 141736-87-0P 141736-88-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and conversion to heterocycle)

IT 141736-78-9P 141736-79-0P 141736-80-3P 141736-81-4P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation and fungicidal activity of)

IT 1215-55-0P 22233-86-9P 22454-54-2P 25642-37-9P 39575-07-0P
 39575-26-3P 62214-31-7P 109352-09-2P 113143-39-8P 141736-71-2P
 141736-72-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with thiols)

IT 30082-73-6P 113367-87-6P 141736-73-4P 141736-74-5P 141736-75-6P
 141736-76-7P 141736-77-8P 141736-82-5P 141736-83-6P 141736-84-7P
 141736-85-8P 141736-89-2P 141736-90-5P 141736-91-6P 141736-92-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

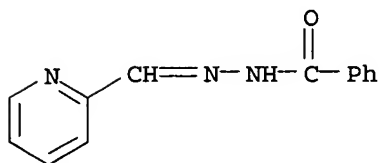
IT 28123-77-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, fungicidal activity and reactions of)

IT 68-11-1, Thioglycolic acid, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with benzoylhydrazones)

IT 613-94-5, Benzoic hydrazide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with carbonyl compds.)

IT 1215-55-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with thiols)

RN 1215-55-0 HCAPLUS
 CN Benzoic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:477634 HCAPLUS
 DN 107:77634
 ED Entered STN: 05 Sep 1987
 TI Anthelmintic pyridinyl acylhydrazones
 IN Rector, Douglas L.; Conder, George A.; Folz, Sylvester D.
 PA Upjohn Co., USA
 SO PCT Int. Appl., 131 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC C07D213-53; C07D213-89; C07D405-12; C07D405-06; C07D213-61
 CC 27-16 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 5

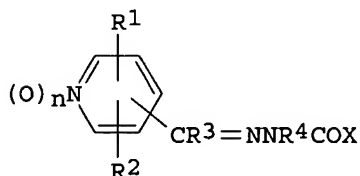
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
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	AU 582214	B2	19890316		
	EP 214158	A1	19870318	EP 1986-900935	19860123 <--
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
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	ES 551807	A1	19880216	ES 1986-551807	19860210 <--
	US 5011932	A	19910430	US 1986-934575	19861003 <--
	DK 8604849	A	19861010	DK 1986-4849	19861010 <--
	US 5023334	A	19910611	US 1989-402385	19890901 <--
PRAI	US 1985-700375	A	19850211	<--	
	US 1985-715425	A	19850325	<--	
	WO 1986-US72	A	19860123	<--	
	US 1986-934575	A1	19861003	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		
WO 8604582	IC	C07D213-53IC	C07D213-89IC	C07D405-12IC
		C07D405-06IC	C07D213-61	

GI



I

- AB Anthelmintic pyridinyl acylhydrazones I (R₁, R₂ = H, OH, alkyl, alkoxy, alkylthio, halo, CF₃; R₃, R₄ = H, alkyl, (un)substituted cycloalkyl, Ph, phenalkyl; R₃ may also be 1,3-dioxacyclohexan-5-yl; X = H, (un)substituted alkyl, Ph, cycloalkyl, pyrrolidinyl, piperidinyl, heteroarom., naphthyl; n = 0, 1) (>400 compds.) are prepared. Thus, benzhydrazone was treated with 2-acetylpyridine to give 64% I (n = 0, R₁ = R₂ = R₄ = H, R₃ = Me, X = Ph, pyridinyl group is 2-substituted). All compds. were tested for anthelmintic activity in sheep; at 100 mg/kg orally, I (n = 0, R₁ = R₂ = R₄ = H, R₃ = Me, X = 4-EtOC₆H₄, pyridinyl group is 4-substituted) gave 94.6% clearance of adult worms (*Haemonchus contortus*).
- ST pyridinyl acylhydrazone anthelmintic sheep; hydrazone pyridinyl anthelmintic sheep
- IT Anthelmintics
- IT ((pyridinylalkylidene) acylhydrazones)
- IT Sheep
- IT (anthelmintics for, (pyridinylalkylidene) acylhydrazones as)
- IT Hydrazones
- RL: SPN (Synthetic preparation); PREP (Preparation)
- IT (acyl, pyridinylalkylidene, preparation of, as anthelmintics)
- IT 1088-98-8P 1094-39-9P 1094-42-4P 1094-44-6P 1097-01-4P
 1097-02-5P 1215-53-8P 1215-55-0P 1219-42-7P 1507-93-3P
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 83710-34-3P 85748-62-5P 88053-38-7P 91803-29-1P

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RL: BAC (Biological activity or effector, except adverse);
 BSU (Biological study, unclassified); SPN (Synthetic preparation);
 THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)

(preparation and anthelmintic activity of)

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RL: BAC (Biological activity or effector, except adverse);

BSU (Biological study, unclassified); SPN (Synthetic preparation);

THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(preparation and anthelmintic activity of)

IT 109374-07-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with benzoyl chloride)

IT 55676-22-7 78790-82-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with hydrazide)

IT 872-85-5 1017-24-9 1122-54-9, 4-Acetylpyridine 1122-62-9,
2-Acetylpyridine 1570-48-5 1701-69-5, 4-Propionylpyridine 1701-73-1
14548-46-0, 4-Benzoylpyridine 27049-45-2 36357-38-7 85727-04-4
109374-11-0 109415-00-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with hydrazides)

IT 6952-93-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with pyridinyl ketones)

IT 1701-69-5, 4-Propionylpyridine 2402-96-2, 4-Acetylpyridine 1-oxide
79251-07-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactions of, with hydrazides)

IT 339-59-3, 4-Trifluoromethylbenzhydrazide 553-53-7, Nicotinic acid
hydrazide 613-94-5, Benzhydrazide 624-84-0, Formyl hydrazine
636-97-5, p-Nitrobenzhydrazide 870-46-2, tert-Butylcarbazate
1068-57-1, Acetic acid hydrazide 2381-77-3 3403-23-4, Benzhydryl
carbazate 3538-65-6, Butyric acid hydrazide 4114-31-2, Ethyl carbazate
5331-43-1, Benzyl carbazate 6294-89-9, Methyl carbazate 7466-54-8,
2-Methoxybenzhydrazide 7658-80-2 21391-40-2, 1-Menthyl carbazate
22227-25-4 38941-47-8, Cyclohexanecarboxylic acid hydrazide
43038-37-5, 2-Phenoxybenzhydrazide 52709-73-6, Butyl carbazate
63884-38-8 98069-56-8, Cyclobutanecarboxylic acid hydrazide
109374-08-5, Phenyl carbazate hydrochloride 109374-10-9

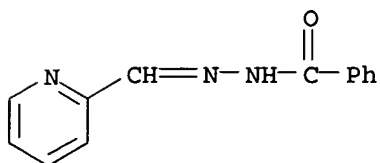
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(reactions of, with pyridinyl ketones)

IT 1215-55-0P 15017-32-0P 58809-89-5P
88053-38-7P 109352-39-8P 109372-64-7P
109372-67-0P

RL: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(preparation and anthelmintic activity of)

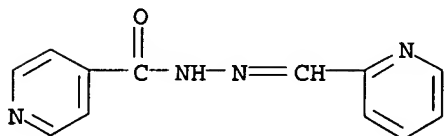
RN 1215-55-0 HCAPLUS

CN Benzoic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



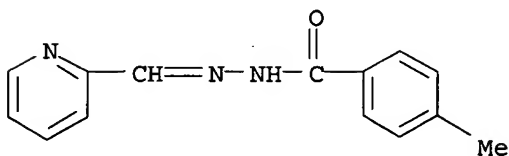
RN 15017-32-0 HCAPLUS

CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



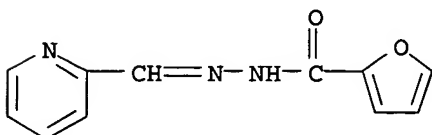
RN 58809-89-5 HCAPLUS

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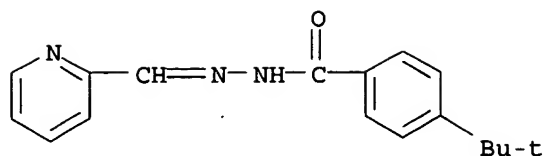
RN 88053-38-7 HCAPLUS

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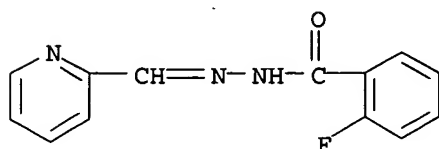


RN 109352-39-8 HCAPLUS

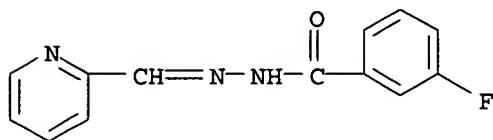
CN Benzoic acid, 4-(1,1-dimethylethyl)-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



RN 109372-64-7 HCAPLUS
 CN Benzoic acid, 2-fluoro-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



RN 109372-67-0 HCAPLUS
 CN Benzoic acid, 3-fluoro-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1985:106252 HCAPLUS

DN 102:106252

ED Entered STN: 06 Apr 1985

TI The effect of various chelating agents on the mobilization of iron from reticulocytes in the presence and absence of pyridoxal isonicotinoyl hydrazone

AU Ponka, Prem; Grady, Robert W.; Wilczynska, Ania; Schulman, Herbert M.

CS Div. Hematol., Montreal Gen. Hosp., Montreal, QC, Can.

SO Biochimica et Biophysica Acta (1984), 802(3), 477-89

CODEN: BBACAQ; ISSN: 0006-3002

DT Journal

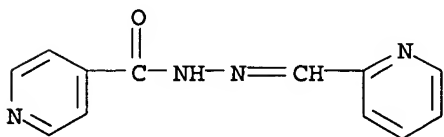
LA English

CC 1-12 (Pharmacology)

AB Various chelating agents were tested for their ability to effect the mobilization of iron from reticulocytes by pyridoxal isonicotinoyl hydrazone (PIH) [737-86-0]. They fall into several groups. The largest group included chelators such as citrate [77-92-9], ethylenediaminetetracetic acid [60-00-4], and desferrioxamine [70-51-9], which failed to affect PIH-induced iron mobilization and did not mobilize iron per se. Either these chelators did not enter reticulocytes or they did not take up iron from PIH-Fe complexes. The second group included chelators such as 2,2'-bipyridine [366-18-7], 1,10-phenanthroline [66-71-7], bathophenanthroline sulfonate [40795-59-3] and N,N'-ethylenebis(o-hydroxyphenylglycine) [1170-02-1] which inhibited PIH-induced iron mobilization from reticulocytes and, when added together with PIH, induced radioiron accumulation in an alc.-soluble fraction of reticulocytes. It appears that these chelators enter the cell and compete with PIH for $^{59}\text{Fe(II)}$, but having bound iron are unable to cross the cell

membrane. Spectral anal. suggested that Fe(II) chelators such as 2,2'-bipyridine and 1,10-phenanthroline removed iron from Fe(II)PIH but were not able to do so from Fe(III)PIH. Compds. such as 2,3-dihydroxybenzoic acid [303-38-8] and catechol [120-80-9] potentiated PIH-induced iron mobilization although they were unable to mobilize iron from reticulocytes by themselves. There was a group of miscellaneous compds. which included chelators that either potentiated the iron-mobilizing effect of PIH as well as mobilizing iron from reticulocytes by themselves (tropolone [533-75-5]), or that reduced PIH-induced iron mobilization while themselves having an iron-mobilizing effect (N,N'-bis(2,3-dihydroxybenzoyl)-1,6-diaminohexane) [139-13-9]. In further expts., heme was found to stimulate globin synthesis in reticulocytes, the heme synthesis of which was inhibited by PIH, suggesting that PIH is probably not toxic to the cells.

- ST reticulocyte iron mobilization chelating agent; pyridoxal
isonicotinoylhydrazone reticulocyte iron
- IT **Chelating agents**
(iron mobilization from reticulocyte response to, pyridoxal
isonicotinoyl hydrazone in relation to)
- IT Reticulocyte
(iron mobilization from, chelating agents effect on, pyridoxal
isonicotinoyl hydrazone in relation to)
- IT 737-86-0
RL: BIOL (Biological study)
(iron mobilization from reticulocyte response to chelating agents in
relation to)
- IT 60-00-4, biological studies 66-71-7 67-43-6 70-51-9 77-92-9,
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95014-65-6 95014-66-7
RL: BIOL (Biological study)
(iron mobilization from reticulocyte response to pyridoxal
isonicotinoyl hydrazone in relation to)
- IT 15017-32-0
RL: BIOL (Biological study)
(iron mobilization from reticulocyte response to pyridoxal
isonicotinoyl hydrazone in relation to)
- RN 15017-32-0 HCAPLUS
- CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA
INDEX NAME)



L52 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1976:587788 HCAPLUS
DN 85:187788
ED Entered STN: 12 May 1984
TI Composition for modifying the maturation of sugar cane
IN Nickell, Louis G.
PA Hawaiian Development Co., USA
SO Braz. Pedido PI, 34 pp.
CODEN: BPXXDX

DT Patent
 LA Portuguese
 IC A01N005-00
 CC 5-3 (Agrochemicals)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI BR 7502085		19760121		<--
PRAI US 1974-458430		19740405	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
BR 7502085	IC	A01N005-00

AB Furoic hydrazides and derivs. promoted ripening in sugarcane.
 Tetrahydrofuroic hydrazide [59293-11-7] treatment produced a juice purity of 79.11% and a pol. % of 10.57 in comparison with 72.96 and 7.95, resp., in the untreated controls.

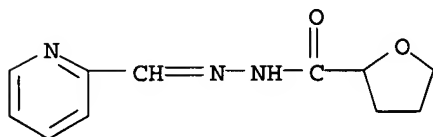
ST furoate hydrazide sugarcane ripening
 IT Sugarcane
 (furoic hydrazides and derivs., as ripening agents for)

IT 696-59-3 2008-49-3 5428-37-5 59293-11-7 60943-68-2 60943-69-3
 60943-70-6 60943-71-7 60943-72-8 60943-73-9 60943-74-0
 60943-75-1 60943-76-2 60943-77-3 60943-78-4 60943-79-5
 60943-80-8 60943-81-9 60943-82-0 60943-83-1 60943-84-2

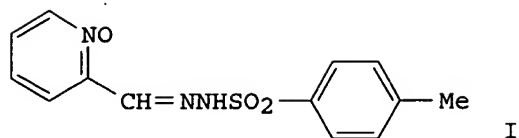
RL: BIOL (Biological study)
 (ripening agent for sugarcane)

IT 60943-77-3
 RL: BIOL (Biological study)
 (ripening agent for sugarcane)

RN 60943-77-3 HCAPLUS
 CN 2-Furancarboxylic acid, tetrahydro-, (2-pyridinylmethylene)hydrazide (9CI)
 (CA INDEX NAME)

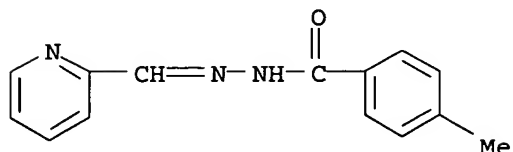


L52 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1976:400190 HCAPLUS
 DN 85:190
 ED Entered STN: 12 May 1984
 TI Antineoplastic and biochemical properties of arylsulfonylhydrazones of 2-formylpyridine N-oxide
 AU Sartorelli, Alan C.; Agrawal, Krishna C.; Booth, Barbara A.; Pittman, James; Bartholomew, David G.; Broom, Arthur D.
 CS Sch. Med., Yale Univ., New Haven, CT, USA
 SO Journal of Medicinal Chemistry (1976), 19(6), 830-3
 CODEN: JMCMAR; ISSN: 0022-2623
 DT Journal
 LA English
 CC 1-3 (Pharmacodynamics)
 Section cross-reference(s): 27
 OS CASREACT 85:190
 GI

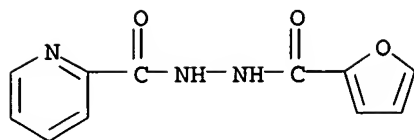


- AB Of 7 title compds., prepared by the reaction of pyridine-2-carboxaldehyde [1121-60-4] with the appropriate sulfonyl hydrazide followed by oxidation, or reaction of 2-formylpyridine N-oxide [7216-40-2] with various arylsulfonyl hydrazides, 1-oxidopyridine-2-carboxaldehyde p-toluenesulfonylhydrazone (I) [50908-22-0] was among the most active, increasing the survival time of mice bearing Sarcoma 180 more than 3-fold. I was active against a broad spectrum of transplanted tumors, including Hepatoma 129, Ehrlich carcinoma, and leukemia L1210. Replacement of the pyridine ring with benzene (2 compds.), quinoline (1 compound), or isoquinoline (1 compound) resulted in loss of activity. Movement of the formylhydrazone side chain from the 2 to the 3 or 4 positions of the N-oxide produced inactive compds., and the pyridine N-oxide function was essential except for 4-substituted derivs. Replacement of the SO₂ group by CO resulted in complete loss of activity, whereas a C could be inserted between the SO₂ and the aryl ring with retention of potency. I caused inhibition of labeled thymidine [50-89-5] and uridine [58-96-8] incorporation into DNA and RNA, resp., of Sarcoma 180 cells.
- ST neoplasm inhibitor formylpyridine oxide arylsulfonylhydrazone
- IT Neoplasm inhibitors
(2-formylpyridine N-oxide arylsulfonylhydrazones)
- IT Molecular structure-biological activity relationship
(neoplasm inhibiting, of 2-formylpyridine N-oxide arylsulfonylhydrazones)
- IT Deoxyribonucleic acids
RL: BIOL (Biological study)
(thymidine incorporation into Sarcoma 180, 2-formylpyridine N-oxide arylsulfonylhydrazones inhibition of)
- IT Ribonucleic acids
RL: BIOL (Biological study)
(uridine incorporation into Sarcoma 180, 2-formylpyridine N-oxide arylsulfonylhydrazones inhibition of)
- IT 50-89-5, biological studies
RL: BIOL (Biological study)
(DNA of neoplasm incorporation of, 2-formylpyridine N-oxide arylsulfonylhydrazones inhibition of)
- IT 58-96-8
RL: BIOL (Biological study)
(RNA of neoplasm incorporation of, 2-formylpyridine N-oxide arylsulfonylhydrazones inhibition of)
- IT 1121-60-4 7216-40-2
RL: BIOL (Biological study)
(condensation of, with hydrazine derivative)
- IT 1666-17-7P 18708-54-8P 19350-76-6P 22353-29-3P 50908-22-0P
58809-80-6P 58809-81-7P 58809-82-8P 58809-83-9P 58809-84-0P
58809-85-1P 58809-86-2P 58809-87-3P 58809-88-4P 58809-89-5P
58809-90-8P 58809-91-9P 58809-92-0P
RL: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation)
(preparation and neoplasm inhibiting activity of)
- IT 58809-89-5P
RL: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation)
(preparation and neoplasm inhibiting activity of)

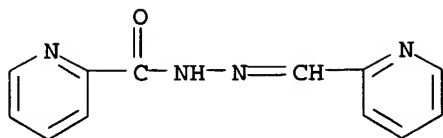
RN 58809-89-5 HCAPLUS
 CN Benzoic acid, 4-methyl-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



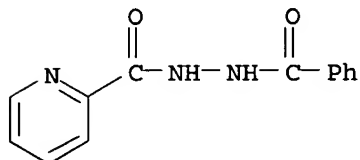
L52 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:527290 HCAPLUS
 DN 83:127290
 ED Entered STN: 12 May 1984
 TI 1-Heteroyl-2-aroylhydrazines and their cyclization products and their effect on phytopathogenic fungi
 AU Nesynov, E. P.; Granin, E. F.; Charuiskaya, L. P.
 CS Inst. Org. Khim., Kiev, USSR
 SO Fiziologicheskii Aktivnye Veshchestva (1966-1992) (1975), 7, 72-5
 CODEN: FAVUAI; ISSN: 0533-1153
 DT Journal
 LA Russian
 CC 5-2 (Agrochemicals)
 GI For diagram(s), see printed CA Issue.
 AB Thirtynine title compds. RCONHNHCOR1 and I (R = α - and β -pyridyl, Ph or α -furyl; R1 = aryl or heterocyclic radical) and 13 related compds. tested in greenhouse were less effective than zineb and benlate stds. I(R = α -pyridyl; R1 = α -C10H7) [56352-66-0] and I(R = β -pyridyl; R1 = Ph) [41125-77-3] were the most effective against wheat stalk rust; however the former was phytotoxic. II [21398-08-3] was the most effective against tomato Phytophthora.
 ST heteroylaroylhydrazine fungicide; hydrazine fungicide; oxadiazole heterylaryl fungicide
 IT Molecular structure-biological activity relationship (fungicidal, of heteroylaroylhydrazines and their cyclization products)
 IT Fungicides and Fungistats (heteroylaroylhydrazines and heterylaryloxadiazoles)
 IT 60-10-6 74-11-3 79-19-6 85-01-8, biological studies 99-94-5
 140-22-7 840-78-8 844-23-5 852-38-0 3641-13-2 6301-56-0
 17336-46-8 21398-08-3 25412-10-6 41125-77-3 56352-65-9
 56352-66-0 56352-70-6 56352-71-7 56352-72-8 56352-73-9
 56352-74-0 56352-75-1 56352-76-2 56352-77-3 56352-78-4
 56352-79-5 56352-80-8 56352-81-9 56352-82-0 56352-83-1
 56352-84-2 56352-85-3 56352-86-4 56352-87-5 56352-88-6
 56352-89-7 56352-90-0 56352-91-1 56352-92-2 56352-93-3
 56352-94-4 56352-95-5 56352-96-6 56352-97-7 56352-98-8
 56352-99-9 56353-00-5 56353-01-6 56353-02-7 56396-14-6
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses) (fungicide)
 IT 56352-70-6
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses) (fungicide)
 RN 56352-70-6 HCAPLUS
 CN 2-Pyridinecarboxylic acid, 2-(2-furanylcarbonyl)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:132761 HCAPLUS
 DN 82:132761
 ED Entered STN: 12 May 1984
 TI Antitumor activity of some acylhydrazines
 AU Rutner, Herman; Lewin, Nathan; Woodbury, E. C.; McBride, Tom J.; Rao, Koppaka V.
 CS John L. Smith Mem. Cancer Res., Chas. Pfizer and Co., Inc., Maywood, NJ, USA
 SO Cancer Chemotherapy Reports, Part 1 (1974), 58(6), 803-11
 CODEN: CCROBU; ISSN: 0576-6559
 DT Journal
 LA English
 CC 1-3 (Pharmacodynamics)
 GI For diagram(s), see printed CA Issue.
 AB When 51 analogs of 1-acetyl-2-picolinoylhydrazine (I) [17433-31-7] were prepared and tested in the Walker 256 carcinosarcoma system, it was shown that the picolinic acid residue in I could be replaced by other residues such as pipercolic, pyrazinoic, benzoic, and several substituted benzoic acid residues with partial retention of activity. In addition, the Ac group could be absent altogether or replaced by selective acyl groups without loss of activity. None the analogs of I had activity in the sarcoma 180 or L1210 leukemia systems.
 ST acylhydrazine antitumor activity; picolinoylhydrazine analog antitumor activity
 IT Neoplasm inhibitors
 (acylhydrazines)
 IT Molecular structure-biological activity relationship
 (neoplasm inhibiting, of acylhydrazines)
 IT 54-85-3 553-53-7 613-94-5 768-05-8 840-79-9 1005-02-3
 1068-57-1 1078-38-2 1452-63-7 3148-73-0 5055-39-0 5382-44-5
 7254-31-1 14331-27-2 15017-24-0 17433-31-7 20349-50-2
 22815-97-0 22816-00-8 25433-37-8 28864-26-8 34955-20-9
 54570-98-8 54570-99-9 54571-00-5 54571-01-6 54571-02-7
 54571-03-8 54571-04-9 54571-05-0 54571-06-1 54571-07-2
 54571-08-3 54571-09-4 54571-10-7 54571-11-8 54571-12-9
 54571-13-0 54571-14-1 54571-15-2 54571-16-3 54571-17-4
 54571-18-5 54571-19-6 54571-20-9 54571-21-0 54571-22-1
 54571-23-2 54571-24-3 54571-25-4 54633-17-9
 RL: BAC (Biological activity or effector, except adverse);
 BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (neoplasm inhibitor)
 IT 15017-24-0 54571-23-2
 RL: BAC (Biological activity or effector, except adverse);
 BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (neoplasm inhibitor)
 RN 15017-24-0 HCAPLUS
 CN 2-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

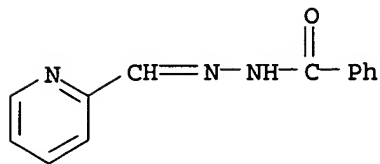


RN 54571-23-2 HCAPLUS
 CN 2-Pyridinecarboxylic acid, 2-benzoylhydrazide (9CI) (CA INDEX NAME)



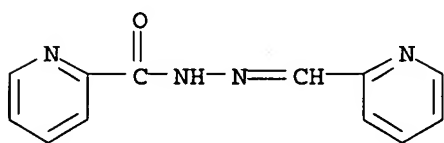
L52 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1967:98544 HCAPLUS
 DN 66:98544
 ED Entered STN: 12 May 1984
 TI Thin-layer chromatography of chelating agents. VII. Isonicotinoyl hydrazide-related compounds and related hydrazones
 AU Nishimoto, Yukio; Toyoshima, Shoji
 CS Eisai Co., Ltd., Tokyo, Japan
 SO Yakugaku Zasshi (1967), 87(1), 27-32
 CODEN: YKKZAJ; ISSN: 0031-6903
 DT Journal
 LA Japanese
 CC 64 (Pharmaceutical Analysis)
 AB cf. CA 66, 73125s. Compds. related to isonicotinoyl hydrazide (I) and their hydrazones show tailing in thin-layer chromatography when using ordinary silica gel. This tailing is probably due to formation of chelate compds. during development by reaction with trace metals in the adsorbent; but since the stability of such metal chelates is far smaller than that of organic analytical reagents, this tailing is only weak. In order to prevent this tailing, the adsorbent was treated with EDTA and a good result was obtained. Detection of these compds. after development is made by Fe(III)-2,2'-bipyridyl and by citric acid reagent solution. I was detected by the former reagent at >0.5 γ. Examns. were also carried out on the separatory detection of related compds.
 ST ISONICOTINOYL HYDRAZIDES CHROMATOG; CHROMATOG ISONICOTINOYL HYDRAZIDES; HYDRAZIDES CHROMATOG; HYDRAZONES CHROMATOG
 IT 15017-12-6
 RL: ANST (Analytical study)
 (cc-hydrazides)
 IT 54-85-3, analysis 495-84-1 553-53-7 613-94-5 796-42-9 1152-31-4
 1215-53-8 1215-55-0 1452-63-7 1507-93-3 2845-81-0
 3232-37-9 4241-73-0 4329-75-3 4813-03-0 4813-04-1 6419-33-6
 13025-99-5 14397-24-1 15017-13-7 15017-21-7 15017-22-8
 15017-23-9 15017-24-0 15017-25-1 15017-26-2
 15017-27-3 15017-28-4 15017-29-5 15017-31-9
 15017-32-0 15075-87-3 20842-45-9
 RL: ANT (Analyte); ANST (Analytical study)
 (chromatog. of)
 IT 1215-55-0 15017-24-0 15017-27-3
 15017-32-0
 RL: ANT (Analyte); ANST (Analytical study)
 (chromatog. of)
 RN 1215-55-0 HCAPLUS

CN Benzoic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



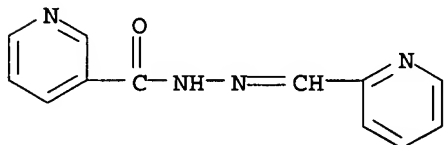
RN 15017-24-0 HCAPLUS

CN 2-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



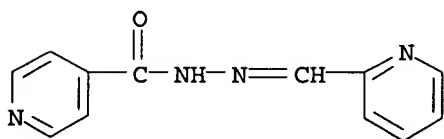
RN 15017-27-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



RN 15017-32-0 HCAPLUS

CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)



L52 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1961:44634 HCAPLUS

DN 55:44634

OREF 55:8659b-c

ED Entered STN: 22 Apr 2001

TI Mechanism of action of drugs causing myoneural block and their antagonists

AU Huidobro, F.

CS Univ. Catolica Chile, Santiago

SO Arzneimittel-Forschung (1960), 10, 967-71

CODEN: ARZNAD; ISSN: 0004-4172

DT Journal

LA Unavailable

CC 11H (Biological Chemistry: Pharmacology)

AB Review of the mechanism of action of drugs with curarelike action. 68 references.

IT Curarelike substances
(biol. action of)

IT Hydrazine, 1-isonicotinoyl-2-[3-pyridylmethylene]-
Hydrazine, 1-nicotinoyl-2-[2-pyridylmethylene]-
Hydrazine, 1-nicotinoyl-2-[3-pyridylmethylene]-
Hydrazine, 1-nicotinoyl-2-[4-pyridylmethylene]-
Hydrazine, 1-picolinoyl-2-[2-pyridylmethylene]-
Hydrazine, 1-picolinoyl-2-[3-pyridylmethylene]-
Hydrazine, 1-picolinoyl-2-[4-pyridylmethylene]-
(effect on bacteria)

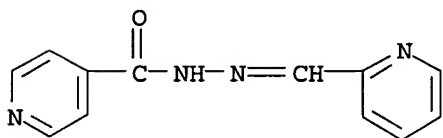
IT 54-92-2, Iproniazid 98-92-0, Nicotinamide
(bacterial response to)

IT 536-33-4, Isonicotinamide, 2-ethylthio- 840-78-8, Hydrazine,
1,2-dinicotinoyl- 840-79-9, Hydrazine, 1,2-dipicolinoyl- 1452-77-3,
Picolinamide 1453-82-3, Isonicotinamide 2845-82-1,
 Δ 2-1,3,4-Oxadiazolin-5-one, 2-[4-pyridyl]- 4329-75-3, Hydrazine,
1,2-diisonicotinoyl- 13025-99-5, Hydrazine, 1-isonicotinoyl-2-(4-
pyridylmethylene)- 15017-32-0, Hydrazine, 1-isonicotinoyl-2-(2-
pyridylmethylene)- 60838-24-6, Δ 2-1,3,4-Oxadiazolin-5-one,
2-[2-pyridyl]- 61690-97-9, Δ 2-1,3,4-Oxadiazolin-5-one,
2-[3-pyridyl]-
(effect on bacteria)

IT 15017-32-0, Hydrazine, 1-isonicotinoyl-2-(2-pyridylmethylene)-
(effect on bacteria)

RN 15017-32-0 HCAPLUS

CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA
INDEX NAME)



L52 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1961:44633 HCAPLUS

DN 55:44633

OREF 55:8659a-b

ED Entered STN: 22 Apr 2001

TI Chemical structure and antibacterial activity of isoniazid analogs

AU Kakimoto, Shichiro; Kruger-Thiemer, Ekkehard; Wempe, Ellen

CS Hokkaido Univ., Sapporo

SO Arzneimittel-Forschung (1960), 10, 963-7
CODEN: ARZNAD; ISSN: 0004-4172

DT Journal

LA Unavailable

CC 11H (Biological Chemistry: Pharmacology)

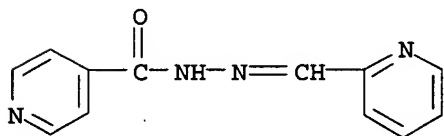
AB A number of isomeric hydrazides, thio amides, thiosemicarbazones, and similar
derivs. of pyridinecarboxylic acids were tested on Mycobacterium
tuberculosis, M. bovis, and M. smegmatis. The most active compds. were
carbohydrazide derivs. attached in 4-position of the pyridine nucleus.
Cross resistance developed in compds. capable of liberating isoniazid in
the organism.

IT Molecular structure
(of isoniazid analogs, bactericidal action and)

IT Mycobacterium bovis
(smegmatis and tuberculosis, isoniazid analog effect on)

IT 2-Furoic acid, hydrazide, Co complex
Acetic acid, [p-cumenylthio]-, hydrazide
Hydrazine, 1-isonicotinoyl-2-[3-pyridylmethylene]-

Hydrazine, 1-nicotinoyl-2-[2-pyridylmethylene]-
 Hydrazine, 1-nicotinoyl-2-[3-pyridylmethylene]-
 Hydrazine, 1-nicotinoyl-2-[4-pyridylmethylene]-
 Hydrazine, 1-picolinoyl-2-[2-pyridylmethylene]-
 Hydrazine, 1-picolinoyl-2-[3-pyridylmethylene]-
 Hydrazine, 1-picolinoyl-2-[4-pyridylmethylene]-
 Isonicotinic acid, 2-ethyl-, hydrazide
 Isonicotinic acid, 2-methyl-, hydrazide
 (effect on bacteria)
 IT 553-53-7, Nicotinic acid, hydrazide
 (and hydrazides, effect on bacteria)
 IT 54-85-3, Isoniazid
 (and related compds., effect on bacteria)
 IT 936-02-7, Salicylic acid, hydrazide
 (bacteria and)
 IT 54-92-2, Iproniazid 98-92-0, Nicotinamide
 (bacterial response to)
 IT 500-22-1, Nicotinaldehyde 872-85-5, Isonicotinaldehyde 1121-60-4,
 Picolinaldehyde
 (derivs., effect on bacteria)
 IT 122-85-0, Acetanilide, 4'-formyl-
 (determination of, Mycobacterium response to)
 IT 98-98-6, Picolinic acid 536-33-4, Isonicotinamide, 2-ethylthio-
 613-94-5, Benzoic acid, hydrazide 840-78-8, Hydrazine, 1,2-dinicotinoyl-
 840-79-9, Hydrazine, 1,2-dipicolinoyl- 937-39-3, Acetic acid, phenyl-,
 hydrazide 1452-63-7, Picolinic acid, hydrazide 1452-77-3, Picolinamide
 1453-82-3, Isonicotinamide 1904-58-1, Anthranilic acid, hydrazide
 2196-13-6, Isonicotinamide, thio- 2361-27-5, 2-Thiophenecarboxylic acid,
 hydrazide 2845-82-1, Δ^2 -1,3,4-Oxadiazolin-5-one, 2-[4-pyridyl]-
 3538-69-0, Cinnamic acid, hydrazide 4329-75-3, Hydrazine,
 1,2-diisonicotinoyl- 4621-66-3, Nicotinamide, thio- 5346-38-3,
 Picolinamide, thio- 13025-99-5, Hydrazine, 1-isonicotinoyl-2-(4-
 pyridylmethylene)- 15017-32-0, Hydrazine, 1-isonicotinoyl-2-(2-
 pyridylmethylene)- 60838-24-6, Δ^2 -1,3,4-Oxadiazolin-5-one,
 2-[2-pyridyl]- 61690-97-9, Δ^2 -1,3,4-Oxadiazolin-5-one,
 2-[3-pyridyl]- 65978-86-1, Mucic acid, dihydrazide 69583-00-2,
 4-Pyridineacetic acid, hydrazide 98488-11-0, 4-Pyridineacrylic acid,
 hydrazide 98594-24-2, 4-Pyridinepropionic acid, hydrazide 100714-47-4,
 4-Pyridineacetic acid, α -benzyl-, hydrazide 100867-63-8,
 4-Pyridineacetic acid, α -benzylidene-, hydrazide
 (effect on bacteria)
 IT 55-22-1, Isonicotinic acid
 (effect on bacteria, hydrazides)
 IT 15017-32-0, Hydrazine, 1-isonicotinoyl-2-(2-pyridylmethylene)-
 (effect on bacteria)
 RN 15017-32-0 HCAPLUS
 CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA
 INDEX NAME)



L52 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1959:89526 HCAPLUS
 DN 53:89526
 OREF 53:16161g-h
 ED Entered STN: 22 Apr 2001

TI Pyridinealdehyde isonicotinoylhydrazone
 IN Offe, Hans A.; Siefken, Werner; Domagk, Gerhard
 PA Farbenfabriken Bayer Akt.-Ges.
 DT Patent
 LA Unavailable
 NCL 12P; 1-01
 CC 10G (Organic Chemistry: Heterocyclic Compounds)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 967974		19580102	DE	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 967974	NCL	12P

AB The title compound was prepared by the reaction of isonicotinic acid hydrazide (I) with pyridine-2-aldehyde (II) or -4-aldehyde (III). Thus, I 102 in EtOH 1100 was treated with II 75 parts to yield after 18 hrs. pyridine-2-aldehyde isonicotinoylhydrazone 139 parts, m. 190°. The 4-aldehyde isomer, prepared from I and III, in 124 parts yield, m. 216°.

IT Isonicotinaldehyde, isonicotinoylhydrazone

IT 55-22-1, Isonicotinic acid
 (hydrazides)

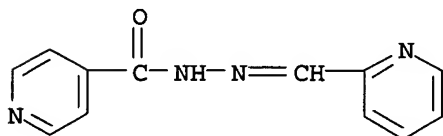
IT 26445-06-7, Pyridinecarboxaldehyde
 (isomers, derivs.)

IT 13025-99-5, Hydrazine, 1-isonicotinoyl-2-(4-pyridylmethylene)-
 15017-32-0, Hydrazine, 1-isonicotinoyl-2-(2-pyridylmethylene)-
 15017-32-0, Picolinaldehyde, isonicotinoylhydrazone
 (preparation of)

IT 15017-32-0, Hydrazine, 1-isonicotinoyl-2-(2-pyridylmethylene)-
 (preparation of)

RN 15017-32-0 HCAPLUS

CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA
 INDEX NAME)



L52 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1959:89525 HCAPLUS

DN 53:89525

OREF 53:16161e-g

ED Entered STN: 22 Apr 2001

TI Nicotinic acid and its esters

IN Heymons, Albrecht; Schnabel, Willy

PA Riedel-de Haen Akt.-Ges.

SO Addn. to Ger. 912, 212

DT Patent

LA Unavailable

NCL 12P; 1-01

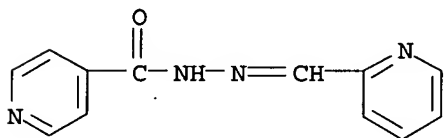
CC 10G (Organic Chemistry: Heterocyclic Compounds)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 959278		19570307	DE	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 959278	NCL	12P
AB	Heating quinoline with a fourfold amount of concentrated H ₂ SO ₄ above 100°, treating the formed sulfuric acid solution several hrs. with a 5-8-fold amount of 50-70% HNO ₃ related to the original amount of quinoline at 220°, warming the mixture with lower mol. weight alkanols, such as MeOH, distilling the excess alkanol, neutralizing the H ₂ SO ₄ , taking up the formed ester in C ₆ H ₆ and distilling the organic solution gives a 80% yield of alkyl nicotinate, e.g. Me nicotinate, m. 39°, b ₁₅ 102-4°. The ester is converted into the free acid in the usual manner. The yields of this process are higher than those given in the main patent.	
IT	59-67-6, Nicotinic acid (and esters)	
IT	13025-99-5, Hydrazine, 1-isonicotinoyl-2-(4-pyridylmethylene)- 15017-32-0, Hydrazine, 1-isonicotinoyl-2-(2-pyridylmethylene)- (preparation of)	
IT	15017-32-0, Hydrazine, 1-isonicotinoyl-2-(2-pyridylmethylene)- (preparation of)	
RN	15017-32-0 HCAPLUS	
CN	4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)	



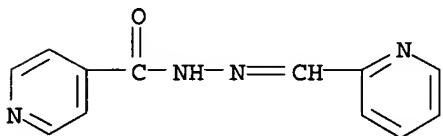
L52 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1956:36258 HCAPLUS
 DN 50:36258
 OREF 50:7147e-f
 ED Entered STN: 22 Apr 2001
 TI Hydrazones of heterocyclic aldehydes
 PA Farbenfabriken Bayer A.-G.
 DT Patent
 LA Unavailable
 CC 10 (Organic Chemistry)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 729348		19550504	GB	<--

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
------------	-------	------------------------------------

GB 729348		
AB	The patent covers compds. useful in treatment of tuberculosis (as well as against other pathogenic bacteria), which have the general structure of piperonylidene or picolylidene derivs. of pyridinecarboxylic acids hydrazides. Thus, 69 g. nicotinic hydrazide refluxed with 75 g. piperonal in MeOH 3 h. gave 127 g. 2-piperonylidene-1-nicotinoylhydrazine, m. 199-200°. The isonicotinic analog m. 236° (from MeOH). Picolinaldehyde similarly gave 2-picolylidene-1-isonicotinoylhydrazine, decompose 190°. 2-(4-Pyridylmethylene)-1-isonicotinoylhydrazine, m. 216°.	
IT	Heterocyclic compounds (aldehydes, hydrazones of)	

IT Tuberculosis
 (antitubercular substances, hydrazones of heterocyclic aldehydes)
 IT Aldehydes
 (hydrazones of heterocyclic)
 IT Hydrazones
 (of heterocyclic aldehydes)
 IT Hydrazine, 1-nicotinoyl-2-piperonylidene-
 Nicotinic acid, piperonylidenehydrazide
 Picolinaldehyde, isonicotinoylhydrazone
 IT 2398-81-4, Nicotinic acid, 1-oxide 13602-12-5, Isonicotinic acid,
 1-oxide
 (derivs.)
 IT 55-22-1, Isonicotinic acid
 (hydrazides)
 IT 120-57-0, Piperonal
 (hydrazones)
 IT 735-97-7, Hydrazine, 1-isonicotinoyl-2-piperonylidene- 13025-99-5,
 Hydrazine, 1-isonicotinoyl-2-[4-pyridylmethylene]- 15017-32-0,
 Hydrazine, 1-isonicotinoyl-2-[2-pyridylmethylene]-
 (preparation of)
 IT 15017-32-0, Hydrazine, 1-isonicotinoyl-2-[2-pyridylmethylene]-
 (preparation of)
 RN 15017-32-0 HCAPLUS
 CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA
 INDEX NAME)



=> fil reg

FILE 'REGISTRY' ENTERED AT 11:36:06 ON 07 FEB 2005
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
 provided by InfoChem.

STRUCTURE FILE UPDATES: 6 FEB 2005 HIGHEST RN 826990-02-7
 DICTIONARY FILE UPDATES: 6 FEB 2005 HIGHEST RN 826990-02-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

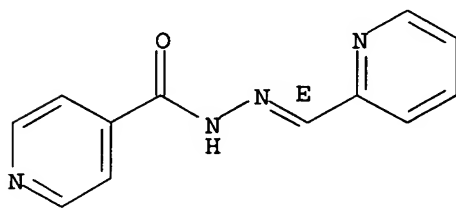
Experimental and calculated property data are now available. For more
 information enter HELP PROP at an arrow prompt in the file or refer
 to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> => d ide can tot 128

L28 ANSWER 1 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN

RN 329183-02-0 REGISTRY
CN 4-Pyridinecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide,
monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C12 H10 N4 O . Cl H
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study)
CRN (257299-41-5)

Double bond geometry as shown.



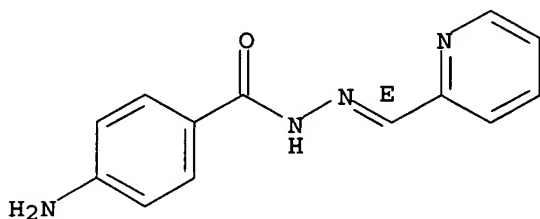
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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L28 ANSWER 2 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN
RN 329182-99-2 REGISTRY
CN Benzoic acid, 4-amino-, (2E)-(2-pyridinylmethylene)hydrazide,
monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C13 H12 N4 O . Cl H
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES
(Uses)
CRN (329182-98-1)

Double bond geometry as shown.



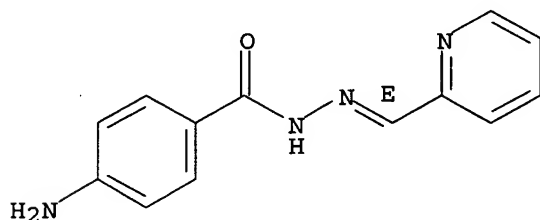
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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L28 ANSWER 3 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN
RN 329182-98-1 REGISTRY
CN Benzoic acid, 4-amino-, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C13 H12 N4 O
CI COM
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Double bond geometry as shown.



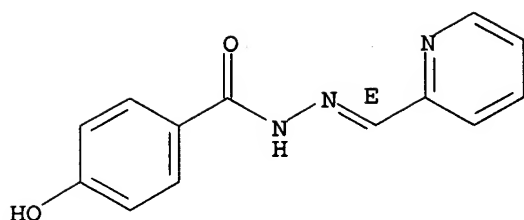
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L28 ANSWER 4 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN
RN 329182-97-0 REGISTRY
CN Benzoic acid, 4-hydroxy-, (2E)-(2-pyridinylmethylene)hydrazide, monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C13 H11 N3 O2 . Cl H
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
CRN (329182-96-9)

Double bond geometry as shown.



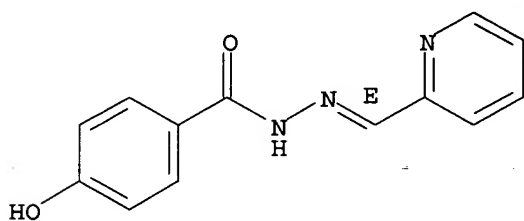
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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L28 ANSWER 5 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN
RN 329182-96-9 REGISTRY
CN Benzoic acid, 4-hydroxy-, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C13 H11 N3 O2
CI COM
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Double bond geometry as shown.



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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

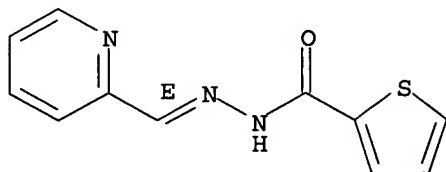
REFERENCE 1: 134:222632

L28 ANSWER 6 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN
RN 329182-95-8 REGISTRY
CN 2-Thiophenecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide, monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H9 N3 O S . Cl H
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES

(Uses)

CRN (270576-18-6)

Double bond geometry as shown.



● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L28 ANSWER 7 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN

RN 329182-94-7 REGISTRY

CN Benzoic acid, 3-bromo-, (2E)-(2-pyridinylmethylene)hydrazide, monohydrochloride (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C13 H10 Br N3 O . Cl H

SR CA

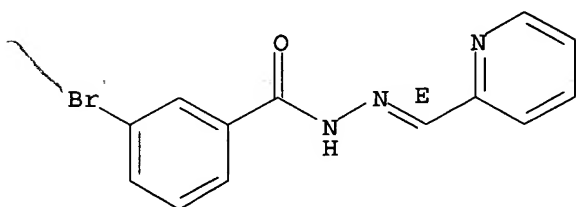
LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

CRN (329182-93-6)

Double bond geometry as shown.



● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L28 ANSWER 8 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN

RN 329182-93-6 REGISTRY

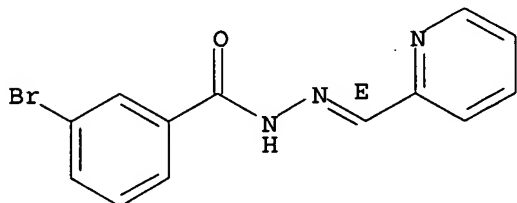
CN Benzoic acid, 3-bromo-, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C13 H10 Br N3 O

CI COM
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Double bond geometry as shown.



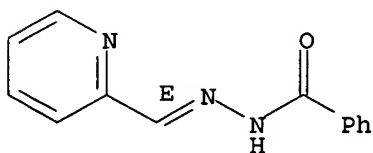
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L28 ANSWER 9 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN
RN 329182-92-5 REGISTRY
CN Benzoic acid, (2E)-(2-pyridinylmethylene)hydrazide, monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C13 H11 N3 O . Cl H
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
CRN (270576-10-8)

Double bond geometry as shown.



● HCl

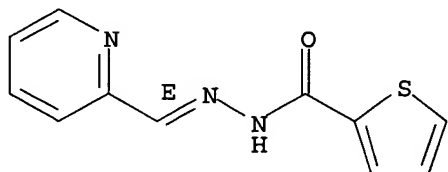
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L28 ANSWER 10 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN
RN 270576-18-6 REGISTRY
CN 2-Thiophenecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS STEREOSEARCH

MF C11 H9 N3 O S
 CI COM
 SR CA
 LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS
 DT.CA Caplus document type: Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
 RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation)

Double bond geometry as shown.



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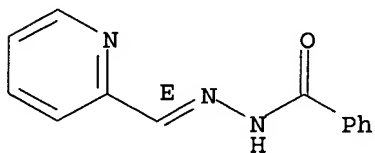
2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

REFERENCE 2: 133:256

L28 ANSWER 11 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 270576-10-8 REGISTRY
 CN Benzoic acid, (2E)-(2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C13 H11 N3 O
 CI COM
 SR CA
 LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS
 DT.CA Caplus document type: Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
 RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation)

Double bond geometry as shown.



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2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

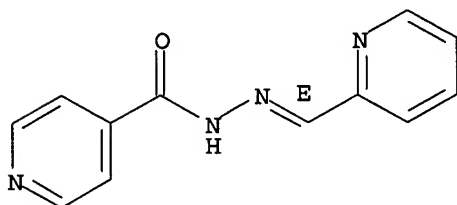
REFERENCE 1: 134:222632

REFERENCE 2: 133:256

L28 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN

RN 257299-41-5 REGISTRY
CN 4-Pyridinecarboxylic acid, (2E)-(2-pyridinylmethylene)hydrazide,
stereoisomer (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C12 H10 N4 O
CI COM
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS
DT.CA CAPLUS document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);
PRP (Properties)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

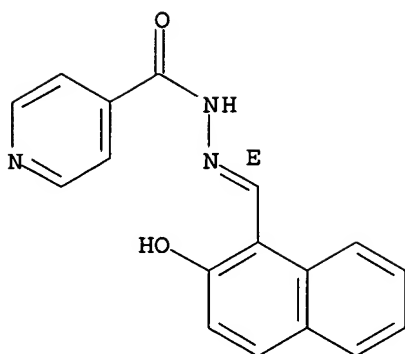
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632
REFERENCE 2: 133:256
REFERENCE 3: 132:144676

=> d ide can tot l30

L30 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN
RN 329183-01-9 REGISTRY
CN 4-Pyridinecarboxylic acid, (2E)-[(2-hydroxy-1-naphthalenyl)methylene]hydrazide (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C17 H13 N3 O2
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS
DT.CA CAPLUS document type: Patent
RL.P Roles from patents: BIOL (Biological study)

Double bond geometry as shown.



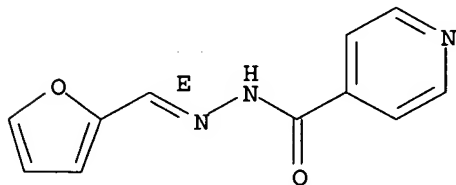
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L30 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN
RN 329183-00-8 REGISTRY
CN 4-Pyridinecarboxylic acid, (2E)-(2-furanylmethylene)hydrazide,
dihydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H9 N3 O2 . 2 Cl H
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES
(Uses)
CRN (213013-18-4)

Double bond geometry as shown.



● 2 HCl

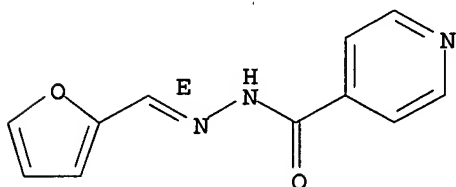
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

L30 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN
RN 213013-18-4 REGISTRY
CN 4-Pyridinecarboxylic acid, (2E)-(2-furanylmethylene)hydrazide (9CI) (CA
INDEX NAME)
FS STEREOSEARCH
MF C11 H9 N3 O2

CI COM
 SR CA
 LC STN Files: CA, CAPLUS, CHEMCATS
 DT.CA Caplus document type: Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
 RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:222632

REFERENCE 2: 132:144676

REFERENCE 3: 130:281622

REFERENCE 4: 129:244728

L30 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN

RN 83706-03-0 REGISTRY

CN 4-Pyridinecarboxylic acid, (2E)-[[3-hydroxy-5-(hydroxymethyl)-2-methyl-4-pyridinyl]methylene]hydrazide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 4-Pyridinecarboxylic acid, [[3-hydroxy-5-(hydroxymethyl)-2-methyl-4-pyridinyl]methylene]hydrazide, (E)-

FS STEREOSEARCH

MF C14 H14 N4 O3

LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS

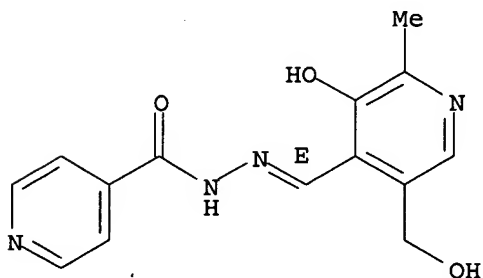
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DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study)

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

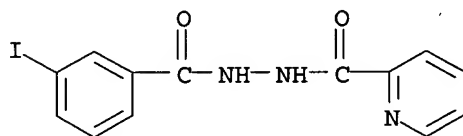
REFERENCE 1: 134:222632

REFERENCE 2: 98:53490

=> s 138 not 128,130
L53 32 L38 NOT (L28 OR L30)

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L53 ANSWER 1 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 453568-49-5 REGISTRY
CN 2-Pyridinecarboxylic acid, 2-(3-iodobenzoyl)hydrazide (9CI) (CA INDEX NAME)
OTHER NAMES:
CN N-Picolinoyl-N'-(3-iodobenzoyl)hydrazine
FS 3D CONCORD
MF C13 H10 I N3 O2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
DT.CA Caplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



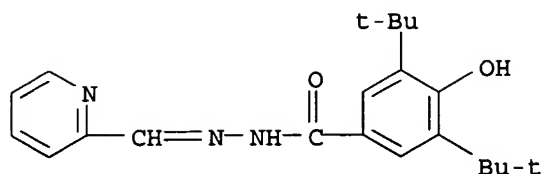
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:255233

REFERENCE 2: 137:201315

L53 ANSWER 2 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 223722-10-9 REGISTRY
CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H27 N3 O2
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

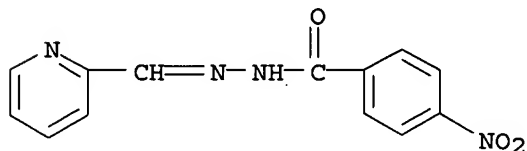


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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 130:325088

L53 ANSWER 3 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 158833-87-5 REGISTRY
CN Benzoic acid, 4-nitro-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H10 N4 O3
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS
DT.CA Caplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

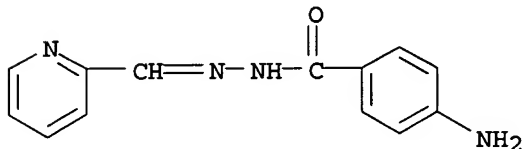
REFERENCE 1: 140:263066

REFERENCE 2: 121:270602

L53 ANSWER 4 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 158833-86-4 REGISTRY
CN Benzoic acid, 4-amino-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H12 N4 O
CI COM
SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER
DT.CA Caplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);

PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:125997

REFERENCE 2: 141:200220

REFERENCE 3: 139:126811

REFERENCE 4: 139:78658

REFERENCE 5: 135:251853

REFERENCE 6: 132:246303

REFERENCE 7: 123:334700

REFERENCE 8: 121:270602

L53 ANSWER 5 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 158833-85-3 REGISTRY

CN Benzoic acid, 4-hydroxy-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H11 N3 O2

SR CA

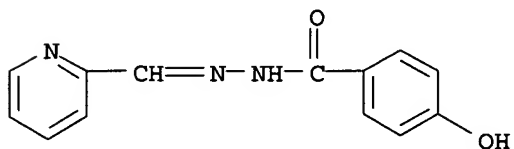
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:200220

REFERENCE 2: 139:78658

REFERENCE 3: 138:62068

REFERENCE 4: 135:251853

REFERENCE 5: 132:246303

REFERENCE 6: 121:270602

L53 ANSWER 6 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 119259-99-3 REGISTRY

CN Benzoic acid, 4-chloro-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H10 Cl N3 O

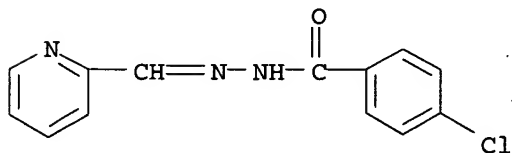
SR CA

LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, GMELIN*

(*File contains numerically searchable property data)

DT.CA CAPLUS document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:125997

REFERENCE 2: 140:263066

REFERENCE 3: 138:62068

REFERENCE 4: 137:162770

REFERENCE 5: 110:107066

L53 ANSWER 7 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 114011-30-2 REGISTRY

CN 2-Thiophenecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

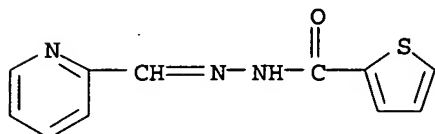
OTHER NAMES:

CN 2-Pyridylaldehyde 2-thenoylhydrazone

FS 3D CONCORD

MF C11 H9 N3 O S

SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER
DT.CA Caplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

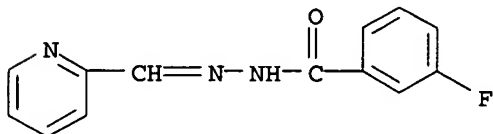


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:200220
REFERENCE 2: 139:255356
REFERENCE 3: 139:241979
REFERENCE 4: 139:78658
REFERENCE 5: 135:251853
REFERENCE 6: 132:246303
REFERENCE 7: 108:197186

L53 ANSWER 8 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 109372-67-0 REGISTRY
CN Benzoic acid, 3-fluoro-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H10 F N3 O
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS, USPATFULL
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

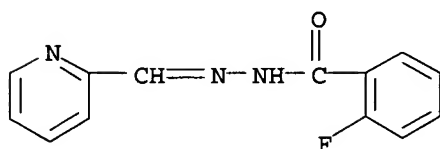


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:77634

L53 ANSWER 9 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 109372-64-7 REGISTRY
CN Benzoic acid, 2-fluoro-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H10 F N3 O
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS, USPATFULL
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

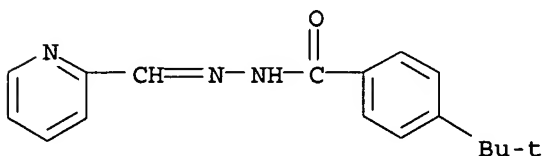


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:77634

L53 ANSWER 10 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 109352-39-8 REGISTRY
CN Benzoic acid, 4-(1,1-dimethylethyl)-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H19 N3 O
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS, USPATFULL
DT.CA Caplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

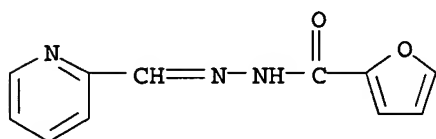
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:62068

REFERENCE 2: 107:77634

L53 ANSWER 11 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 88053-38-7 REGISTRY

CN 2-Furancarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H9 N3 O2
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER, USPATFULL
DT.CA Caplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); PREP (Preparation); PRP (Properties); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: PROC (Process); PRP (Properties)

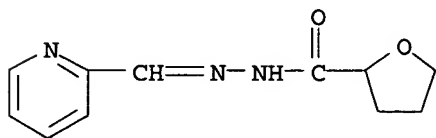


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:32150
REFERENCE 2: 141:84058
REFERENCE 3: 125:157099
REFERENCE 4: 107:77634 ✓
REFERENCE 5: 102:16682
REFERENCE 6: 100:2959

L53 ANSWER 12 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 60943-77-3 REGISTRY
CN 2-Furancarboxylic acid, tetrahydro-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
OTHER NAMES:
CN NSC 204773
FS 3D CONCORD
MF C11 H13 N3 O2
LC STN Files: CA, CAPLUS, CHEMCATS, IFICDB, IFIPAT, IFIUDB
DT.CA Caplus document type: Patent
RL.P Roles from patents: BIOL (Biological study)

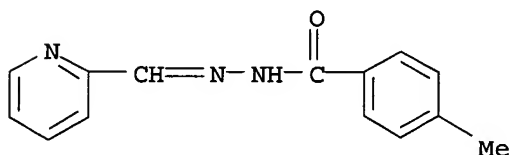


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 85:187788

L53 ANSWER 13 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 58809-89-5 REGISTRY
CN Benzoic acid, 4-methyl-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H13 N3 O
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:263066

REFERENCE 2: 138:62068

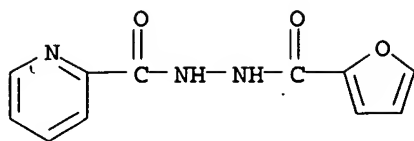
REFERENCE 3: 137:162770

REFERENCE 4: 135:250916

REFERENCE 5: 107:77634

REFERENCE 6: 85:190

L53 ANSWER 14 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 56352-70-6 REGISTRY
CN 2-Pyridinecarboxylic acid, 2-(2-furanylcarbonyl)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H9 N3 O3
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); USES (Uses)

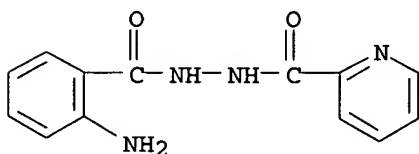


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 83:127290

L53 ANSWER 15 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 54754-56-2 REGISTRY
CN 2-Pyridinecarboxylic acid, 2-(2-aminobenzoyl)hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H12 N4 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)
DT.CA Caplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

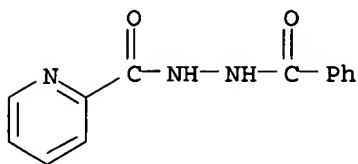


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 82:125383

L53 ANSWER 16 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 54571-23-2 REGISTRY
CN 2-Pyridinecarboxylic acid, 2-benzoylhydrazide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Hydrazine, 1-benzoyl-2-picolinoyl- (6CI)
OTHER NAMES:
CN NSC 90913
FS 3D CONCORD
MF C13 H11 N3 O2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, TOXCENTER
(*File contains numerically searchable property data)
DT.CA Caplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:398813

REFERENCE 2: 140:263033

REFERENCE 3: 136:241580

REFERENCE 4: 82:132761

REFERENCE 5: 55:112136

L53 ANSWER 17 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 53584-52-4 REGISTRY

CN Benzoic acid, 2-hydroxy-, (2-pyridinylmethylene)hydrazide, (E)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-Picolinylidene-N'-salicyloylhydrazine

FS STEREOSEARCH

MF C13 H11 N3 O2

LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS, GMELIN*

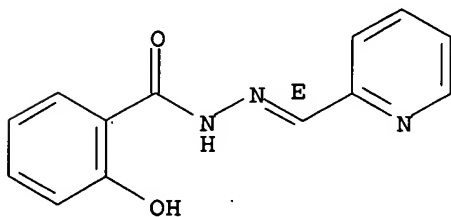
(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

RLD.NP Roles for non-specific derivatives from non-patents: PRP (Properties)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 91:107543

REFERENCE 2: 88:68437

REFERENCE 3: 81:128080

L53 ANSWER 18 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 31004-94-1 REGISTRY

CN Picolinic acid, 5-butyl-, (2-pyridylmethylene)hydrazide (8CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-Fusariny-2-picolinyldenehydrazine

FS 3D CONCORD

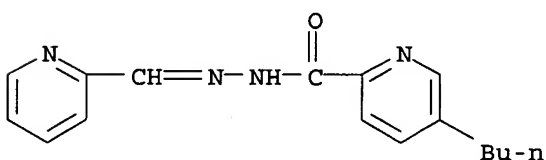
MF C16 H18 N4 O

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 74:29239

L53 ANSWER 19 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 25350-75-8 REGISTRY

CN Benzoic acid, 4-bromo-2-hydroxy-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Salicylic acid, 4-bromo-, (2-pyridylmethylene)hydrazide (8CI)

FS 3D CONCORD

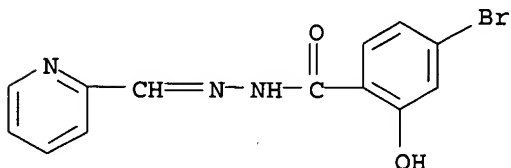
MF C13 H10 Br N3 O2

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

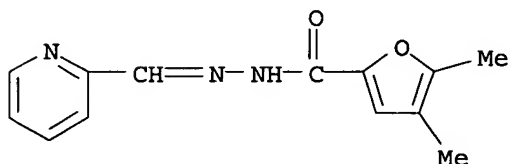
1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 72:110952

L53 ANSWER 20 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 20842-36-8 REGISTRY
CN 2-Furoic acid, 4,5-dimethyl-, (2-pyridylmethylene)hydrazide (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H13 N3 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)
DT.CA Caplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)

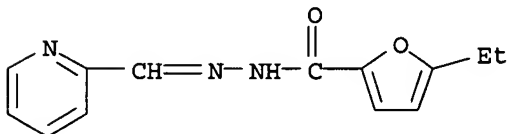


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 70:11530

L53 ANSWER 21 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 20842-27-7 REGISTRY
CN 2-Furoic acid, 5-ethyl-, (2-pyridylmethylene)hydrazide (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H13 N3 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)
DT.CA Caplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)



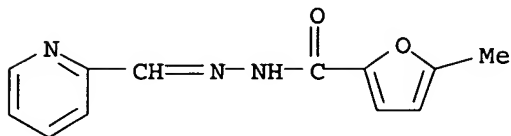
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 70:11530

L53 ANSWER 22 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 20842-24-4 REGISTRY
CN 2-Furoic acid, 5-methyl-, (2-pyridylmethylene)hydrazide (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H11 N3 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS
(*File contains numerically searchable property data)
DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)

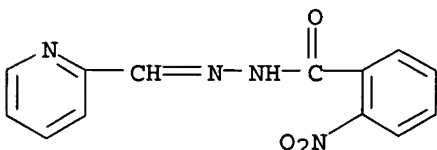


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 70:11530

L53 ANSWER 23 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 19011-96-2 REGISTRY
CN Benzoic acid, o-nitro-, (2-pyridylmethylene)hydrazide (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H10 N4 O3
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS
(*File contains numerically searchable property data)
DT.CA Caplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)

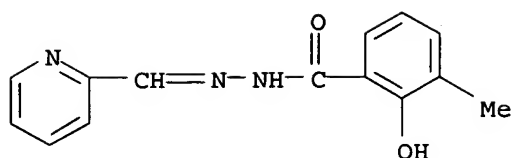


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 69:27401

L53 ANSWER 24 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
RN 18176-42-6 REGISTRY
CN 2,3-Cresotic acid, (2-pyridylmethylene)hydrazide (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H13 N3 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS
(*File contains numerically searchable property data)
DT.CA Caplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 68:104686

L53 ANSWER 25 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 18176-38-0 REGISTRY

CN Benzoic acid, 2-hydroxy-, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Salicylic acid, (2-pyridylmethylene)hydrazide (6CI, 8CI)

OTHER NAMES:

CN Pyridine-2-aldehyde salicyloylhydrazone

CN Pyridine-2-carboxaldehyde 2'-hydroxybenzoylhydrazone

FS 3D CONCORD

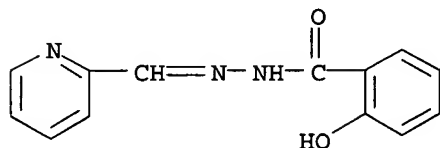
MF C13 H11 N3 O2

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, GMELIN*, TOXCENTER
(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: PRP (Properties)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

13 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
13 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:55079

REFERENCE 2: 132:202643

REFERENCE 3: 110:107066

REFERENCE 4: 98:136771

REFERENCE 5: 97:155494

REFERENCE 6: 91:203722

REFERENCE 7: 90:214705

REFERENCE 8: 90:33454

REFERENCE 9: 88:15209

REFERENCE 10: 83:68374

L53 ANSWER 26 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 15033-15-5 REGISTRY

CN Hydrazine, 1-(4,5-dimethyl-2-furoyl)-2-picolinoyl- (8CI) (CA INDEX NAME)

FS 3D CONCORD

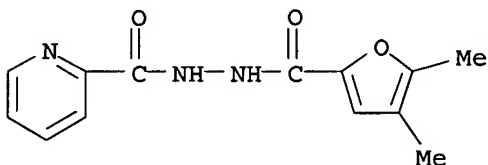
MF C13 H13 N3 O3

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 67:53943

L53 ANSWER 27 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 15033-00-8 REGISTRY

CN Hydrazine, 1-(5-ethyl-2-furoyl)-2-picolinoyl- (8CI) (CA INDEX NAME)

FS 3D CONCORD

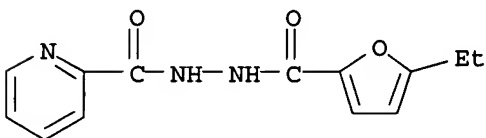
MF C13 H13 N3 O3

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

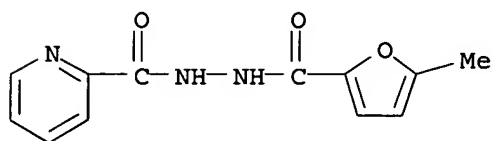
1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 67:53943

L53 ANSWER 28 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 15032-97-0 REGISTRY
 CN Hydrazine, 1-(5-methyl-2-furoyl)-2-picolinoyl- (8CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C12 H11 N3 O3
 LC STN Files: BEILSTEIN*, CA, CAPLUS
 (*File contains numerically searchable property data)
 DT.CA Caplus document type: Journal
 RL.NP Roles from non-patents: PREP (Preparation)

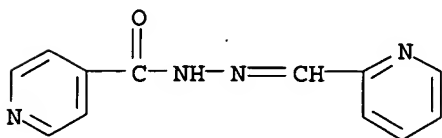


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 67:53943

L53 ANSWER 29 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 15017-32-0 REGISTRY
 CN 4-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Hydrazine, 1-isonicotinoyl-2-(2-pyridylmethylene)- (6CI)
 CN Isonicotinic acid, (2-pyridylmethylene)hydrazide (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN 2-Pyridinealdehyde isonicotinoylhydrazone
 CN 2-Pyridinecarboxaldehyde isonicotinoyl hydrazone
 CN 2-Pyridylcarboxaldehyde isonicotinoyl hydrazone
 CN NSC 690252
 CN NSC 76233
 FS 3D CONCORD
 MF C12 H10 N4 O
 CI COM
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, GMELIN*, SPECINFO, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 DT.CA Caplus document type: Conference; Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses); NORL (No role in record)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

31 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
32 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 142:47951
REFERENCE 2: 141:235862
REFERENCE 3: 141:200220
REFERENCE 4: 139:255356
REFERENCE 5: 139:241979
REFERENCE 6: 139:190384
REFERENCE 7: 139:126811
REFERENCE 8: 139:78658
REFERENCE 9: 136:241580
REFERENCE 10: 135:251853

L53 ANSWER 30 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 15017-27-3 REGISTRY

CN 3-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Nicotinic acid, (2-pyridylmethylene)hydrazide (6CI, 7CI, 8CI)

OTHER NAMES:

CN Picolinaldehyde nicotinoylhydrazone

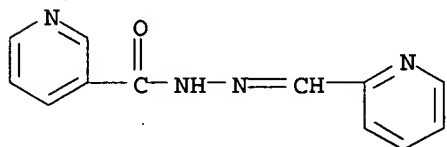
FS 3D CONCORD

MF C12 H10 N4 O

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: ANST (Analytical study); PREP (Preparation);
RACT (Reactant or reagent); USES (Uses); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:128270
REFERENCE 2: 135:127341

REFERENCE 3: 135:40101

REFERENCE 4: 104:14187

REFERENCE 5: 94:10656

REFERENCE 6: 70:11530

REFERENCE 7: 66:98544

REFERENCE 8: 57:78313

L53 ANSWER 31 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN

RN 15017-24-0 REGISTRY

CN 2-Pyridinecarboxylic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Picolinic acid, (2-pyridylmethylene)hydrazide (6CI, 7CI, 8CI)

OTHER NAMES:

CN 2-Pyridinecarboxaldehyde picolinoylhydrazone

CN 2-Pyridinecarboxylic acid, (2-pyridylmethylene)hydrazide

CN NSC 106460

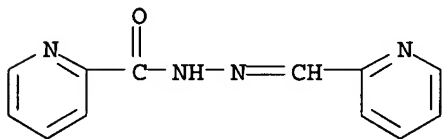
FS 3D CONCORD

MF C12 H10 N4 O

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)

DT.CA CAPLUS document type: Journal

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)

8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 142:47951

REFERENCE 2: 135:28375

REFERENCE 3: 82:132761

REFERENCE 4: 81:114015

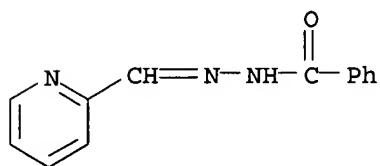
REFERENCE 5: 70:11530

REFERENCE 6: 66:98544

REFERENCE 7: 57:78313

REFERENCE 8: 54:16987

L53 ANSWER 32 OF 32 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 1215-55-0 REGISTRY
 CN Benzoic acid, (2-pyridinylmethylene)hydrazide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoic acid, (2-pyridylmethylene)hydrazide (7CI, 8CI)
 OTHER NAMES:
 CN 2-Formylpyridine benzoylhydrazone
 CN NSC 609221
 CN Pyridine-2-carboxaldehyde benzoylhydrazone
 FS 3D CONCORD
 MF C13 H11 N3 O
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
 GMELIN*, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 DT.CA Caplus document type: Conference; Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP
 (Properties); RACT (Reactant or reagent); USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); PREP (Preparation); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

28 REFERENCES IN FILE CA (1907 TO DATE)
 28 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 142:125997
 REFERENCE 2: 141:200220
 REFERENCE 3: 140:263066
 REFERENCE 4: 139:255356
 REFERENCE 5: 139:241979
 REFERENCE 6: 139:78658
 REFERENCE 7: 138:62068
 REFERENCE 8: 137:319630
 REFERENCE 9: 137:162770
 REFERENCE 10: 136:241580

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